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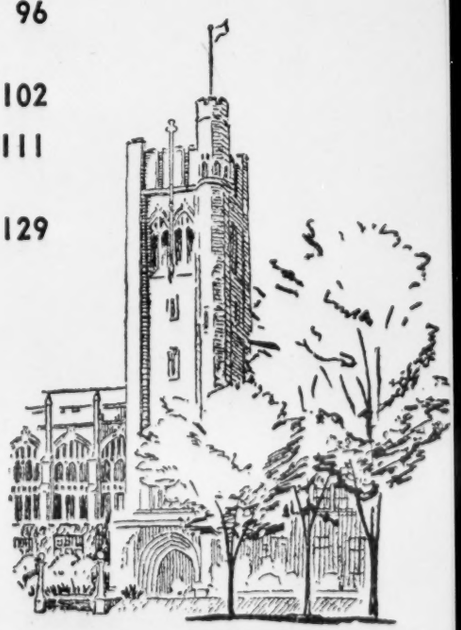

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VOLUME XXII NUMBER 1

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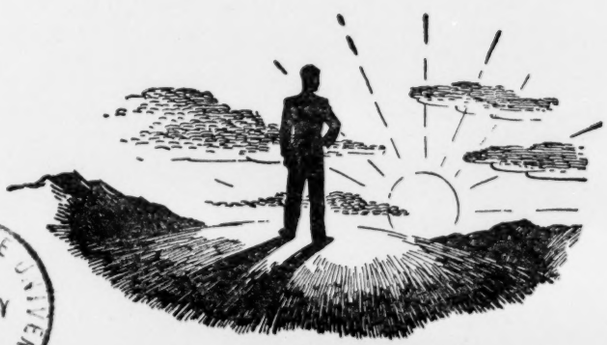

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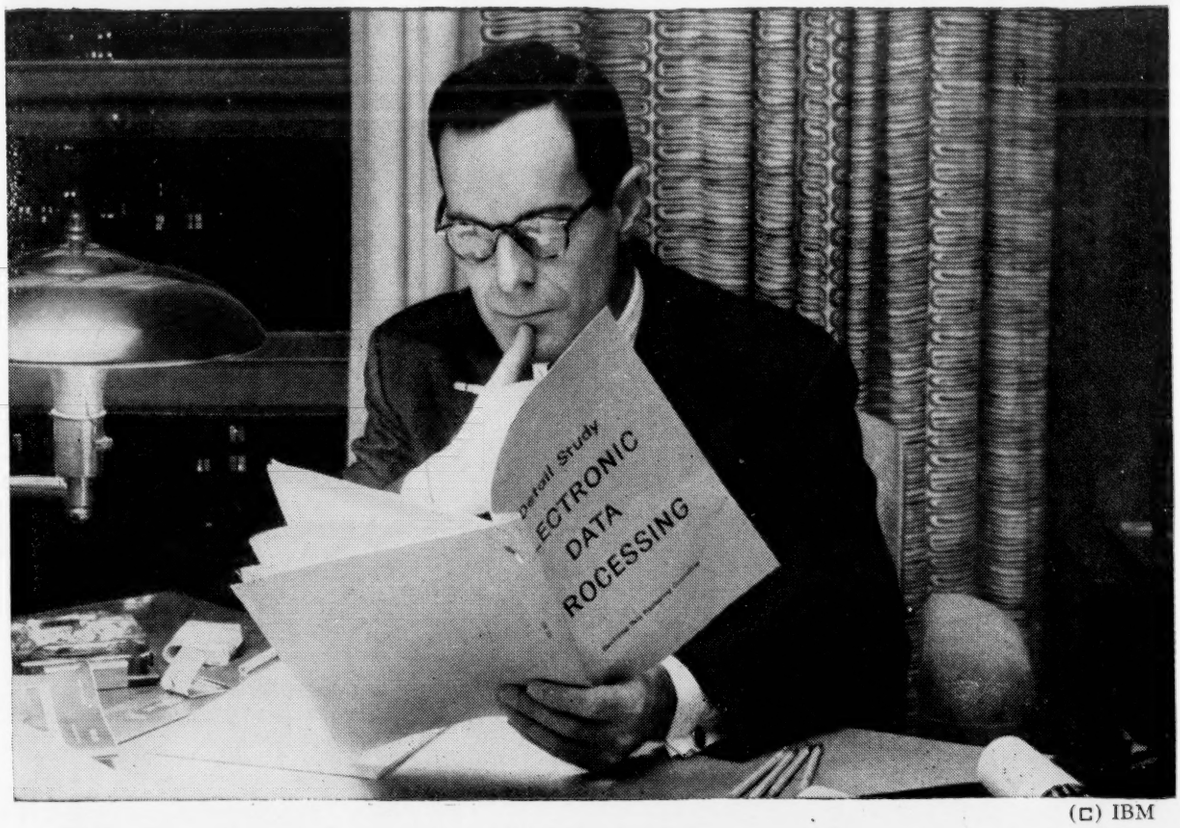

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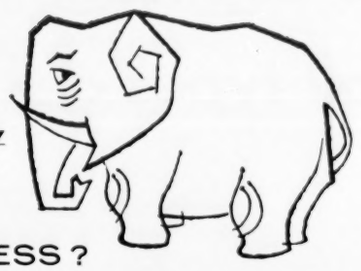

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VOLUME XXII SPRING
Number 1 1957

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Editorial . . .

Whatever direction the Canadian economy will follow in the months ahead—and despite Wall Street jitters and Bay Street blues we have no reason to modify the optimism of the predictions contained in our last issue—all businessmen and economists agree that Canadian business will face increased competition. Consequently, the more urgent it becomes to improve our methods of production, our standards of quality and our means of marketing, and to strengthen our competitive position whether as individuals, companies or country as a whole.

So complicated and big scale has business become, however, that the administrator must look to aids, both personal and mechanical, to help him achieve these necessary and numerous improvements in production, quality and marketing.

Dale Lobsinger, President of the American Statistical Quality Control Society, explains in this issue how statistics can help to maintain high standards both of service and of product, provided they are not misunderstood, adds Professor Safarian of Saskatoon: Godfrey E. Briefs of General Motors of Canada shows how to use statistics to forecast the size of future markets. Doctors Leighton and Thain, Professors of Marketing at this School of Business Administration outline in articles on discount houses and trade fairs means of marketing often neglected in Canada.

But how is the administrator to control his fast growing enterprise? Although Oxford and Webster Dictionaries do not so define the word, to K. R. Patrick, President of Canadian Aviation Electronics, electronics mean control, and he sets out clearly for the layman to understand how the great scientific advances of the last few years have aided the control not only of guided missiles and fogbound airplanes but also the science of business administration.

AUTOMATION

SOME may view with misgiving any device that tends to reduce the amount of labor in the production of goods. In earlier generations the introduction of such devices has caused riots. Even today, after a couple of centuries of enlightenment, there are a few who complain of what they call automation.

Despite these alarms, labor-saving devices have added to employment, increased wages per hour and raised living standards for all. An obvious example is the fact that a man operating a trenching machine is paid many times more than a man who, a generation ago, was asked to dig a ditch with a pick and shovel.

The steel industry still produces steel for picks and shovels, but earth-moving machinery in general uses greater tonnages of steel than do factories making picks and shovels.

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Letters to the Editor . . .

1957 Outlook

. . . Congratulations on the reviews of 1956 and previews of 1957 in the U.S.A. and Canada and more especially on the U.W.O. poll of Canadian executives' expectations. However much we may rely on the careful model-building of economists for our predictions, it is good to have them so overwhelmingly confirmed by the businessmen who are responsible for approving plans of capital expenditure . . .

Brian Lewis, Montreal

. . . Dr. Petrie certainly put out his neck far in making his ten specific predictions about Canada in 1957 . . .

David Stahls, Kitchener

Business and Art

. . . I look forward to the time when you will relieve us from any reading at all, reducing all the print into a series of brilliant drawings.

Don Crouch, Toronto

Mineral Exploration

. . . The Paley report certainly emphasized the importance of Canada's raw materials to the U.S. consumer. I wish Prof. Uffen could have informed us what proportion of the prospecting in Canada by the interesting modern methods he outlines is being done by Canadians and financed by Canadian business.

Bruce Johnston, Quebec City

University Graduates

Your big business views of University graduates are interesting to the small businessman who finds himself falling behind in the competitive rush for the new crop of graduating students. How can you persuade your students to see the disadvantages of going into the big business where, as shown in Hoppes' cartoon, they are merely one of a crowd, and the far greater advantages of the great variety of jobs and responsiblities which would come their way in the small business? In any event, how does a small business recruit Univerity graduates?

Ivor Braun, Vancouver

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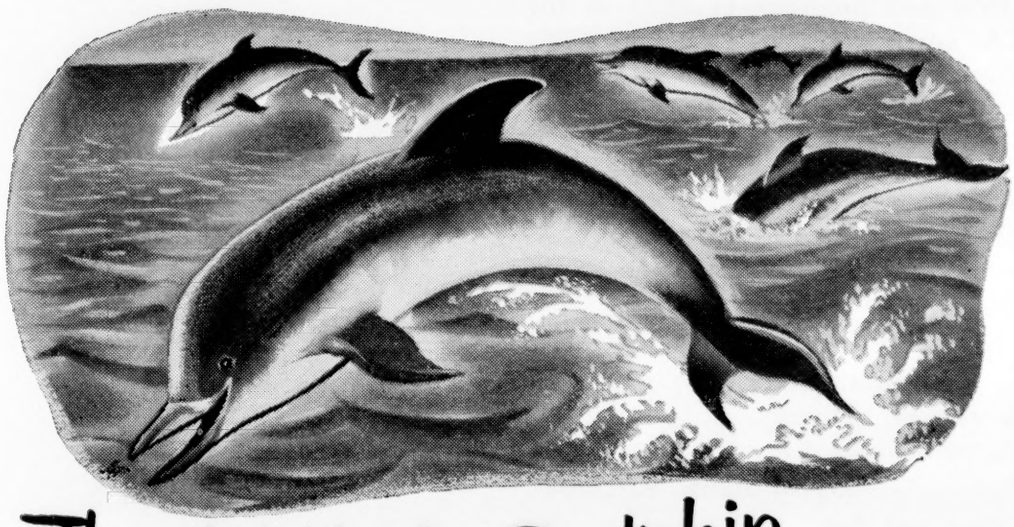

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Nature's biggest ocean show-off, the dolphin, gives hours of entertainment to those who see him in action. Travelling in family groups, they delight in jumping high out of the water and skimming gracefully over the waves. But behind the dolphin's antics lies a serious nature in providing for each other's needs. The air-breathing dolphin, when wounded by his enemies, would normally drown, but two others support it above the surface until it regains its strength while the rest of the group ward off repeated attacks. When older dolphins lose their agility, other members of the family provide them with food and protection.

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About Our Authors . . .

President and Managing Director of Canadian Aviation Electronics Limited, **K. R. Patrick,** O.B.E., C.D., D.Eng., was previously associated with RCA Victor Company in Montreal. As a member of the RCAF during World War II he played an important part in the development of electronic devices for the British, American and Canadian Governments.

Dr. David S. R. Leighton, B.A.(Econ) Queens, MBA & DBA Harvard, is now Assistant Professor of Business Administration at the University of Western Ontario. Previously he was with the Canadian Press as a staff writer and editor, and while at Harvard did a three-year study of discount houses. He is currently writing a book "Discount House Merchandising and Promotion" and has two other books in process of publication—"Problems in Marketing" and "Marketing in Canada" (as co-editor).

Before being transferred to General Motors of Canada to direct their economic research **Dr. G. E. Briefs** was Financial Analyst & Economist at the Ford Division in Livonia, Michigan. Previous to his connection with Ford Dr. Briefs taught at Georgetown University and George Washington University and was with the U.S. Army during the Korean War.

David C. Greenwood, educated at Oxford, former teacher at the Oxford School of Commerce, is now on the staff at the University of California. Some of his other works include "Essays in Human Relations" and "Contemporary Theories of Union-Management Relations" both published by the Public Affairs Press.

J. N. Wolfe after receiving his B.Litt degree in 1953 for advanced studies at Nuffield College, Oxford, England, has been a lecturer in political economy at the University of Toronto. Mr. Wolfe's works have also appeared in The Economic Journal, Review of Economic Studies and Canadian Journal of Economics and Political Science.

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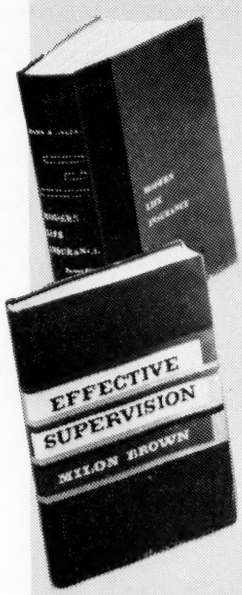

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ABOUT OUR AUTHORS - *Cont.*

D. L. Lobsinger, President of the American Society of Quality Control, since 1936 with the United Air Lines began his study of statistical quality control in 1949 to determine its possible applications to administrative and service factors in an airline. Successful in establishing many profitable projects he has trained 300 selected individuals in the basic concepts of S.Q.C.

An Associate Professor of Economics at the University of Saskatchewan, **Dr. A. E. Safarian,** B.A. Toronto, Ph.D. California, has also published papers on foreign trade and foreign investment in Canada. He recently served on the staff of the Gordon Commission.

Dr. Donald Thain, now Assistant Professor of Business Administration at the University of Western Ontario obtained his B.A. from the University of Toronto and his M.B.A. and D.B.A. from Harvard University and spent three years teaching at Harvard. He has also done consulting work for various utility and manufacturing companies.

Paul M. Roddick who recently joined the staff of the Civil Service Commission in Ottawa as Programme Director was formerly with the Ford Motor Company of Canada and the Departments of Citizenship and Immigration and National Defence.

Robert Von Pilis, after reaching top executive rank in Seiberling Rubber in public relations in Austria, came to Canada and proved himself a successful farmer in Pickering, Ontario. After an editorial stint at the "Farmers' Advocate" he is now co-operative editor on the "Western Producer".

Dr. William Lazer, Assistant Professor of General Business at Michigan State University, received his PhD. in Philosophy from Ohio State University after completing his B.Com. and M.B.A. degrees at University of Manitoba and the University of Chicago. In addition to his teaching experience Dr. Lazer has done consulting work for several large firms including Burns & Co. Ltd., Ford Motor Company, Manitoba Government, Investors' Syndicate of Canada Ltd.

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CANADIAN TAXATION AND THE BUSINESSMAN

K. W. Lemon, F.C.A.

OVER the years a number of beneficial changes have been made in Canada's Income Tax Act which have had the effect of encouraging Canadians to invest in equity securities of Canadian Corporations. These changes, in addition to having a generally stimulating effect on our expanding economy, have greatly increased the opportunities available to Canadian investors for effective estate planning.

Provisions of the Act

While the provisions of the Income Tax Act are extremely complex, the sections which make possible the arrangements most commonly used by Canadian investors for purposes of estate and tax planning are relatively few in number. Such Sections which provide ways and means of minimizing the income taxes and succession duties which would otherwise be payable in respect of investment holdings include the following:

(1) Section 67, which exempts from corporation tax the income of a "personal" investment corporation.

(2) Section 105, which grants a company the right to elect to pay a 15% tax upon undistributed income, and thereby create tax-paid undistributed income which can be distributed free of personal tax.

(3) Section 105-B, which permits a company to limit the tax payable upon its undistributed income to not more than 20% through the use of a trader or dealer in investments.

(4) Section 28(1), which permits a Canadian company to receive dividends free of tax from:
   (a) another Canadian corporation, or
   (b) a non-resident corporation or a foreign business corporation, as long as the Canadian corporation owns more than 25% of the voting stock of the dividend-paying corporation.

(5) Section 38, which permits an individual resident in Canada to reduce the tax payable by him on Canadian dividends by 20% of the amount of these dividends.

(6) Section 111, which imposes a tax upon gifts made during the lifetime of a taxpayer which rates of gift tax are frequently less than the rates of succession duty otherwise payable by his estate.

Estate Planning

In most cases estate planning for the owner of equity securities should accomplish two main objectives:

(1) The holding of investments in such a manner as to attract the minimum amount of succession duties on their value in the event of death; and

(2) The arranging for the payment of minimum income taxes on income derived from such securities.

Both of these objectives can usually be obtained most effectively by the formation of a new corporation to hold the existing securities.

By an appropriate application of this method the owner of securities can "freeze" his estate at present levels of value and thus preclude future significant increases in his net worth and consequent increases in the succession duties payable on his death. This result may be accomplished by selling his portfolio of equity securities to the new holding company in exchange for debt securities or preference shares of that company. The equity shares of the holding company can then be issued to those persons (usually children or grandchildren) who would ultimately receive the underlying securities by inheritance. Under this arrangement, any future increase in the value of the original equity securities will be excluded from the estate of the original holder and will fall instead into the estates of the holders of the common shares of the holding company.

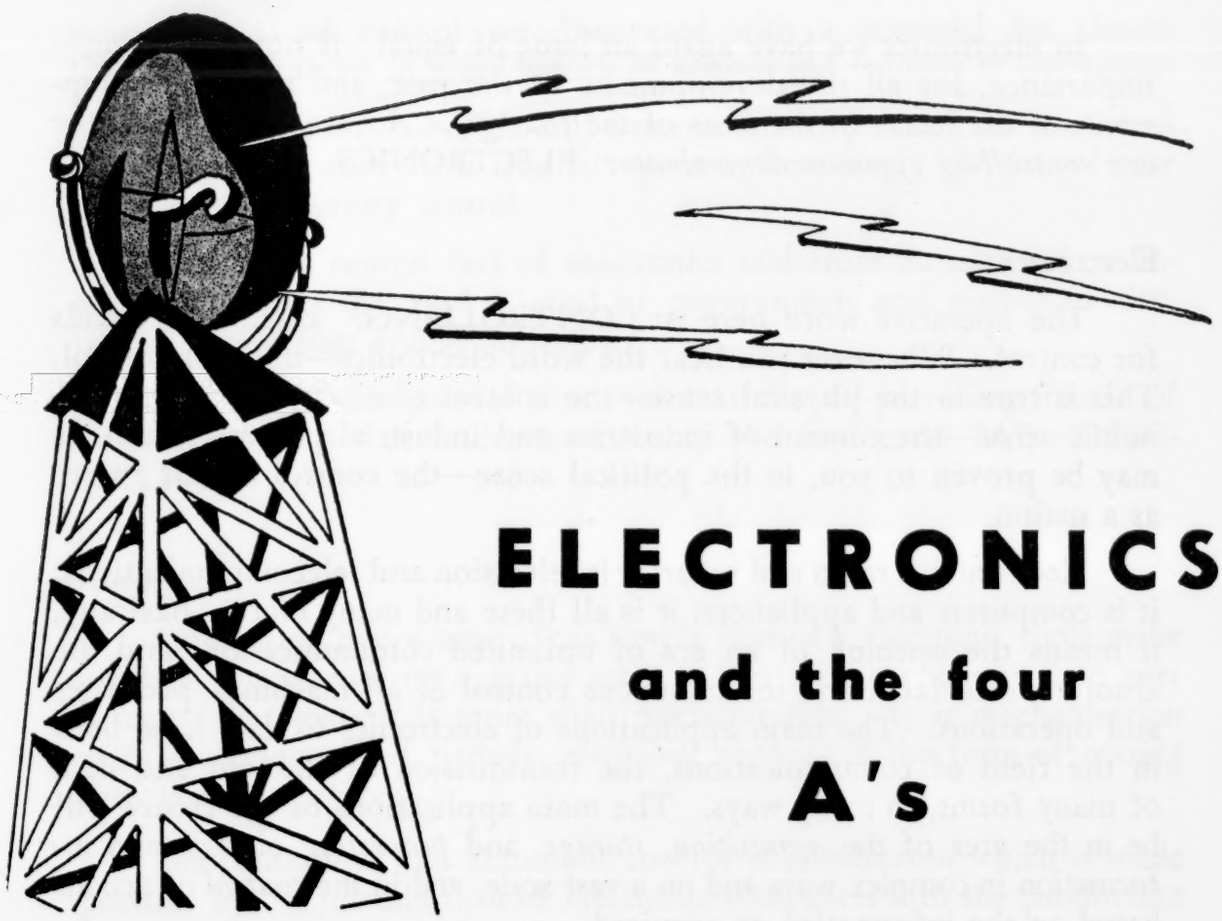
After the "freezing" of the estate of the original investor has been arranged in the manner outlined, steps can be taken, if desired, to effect an actual reduction of his estate in order to reduce further the succession duties which will ultimately be payable. Such steps could include:

(1) The disposition of assets by way of gifts inter vivos; and

(2) The obtaining of future personal cash requirements by way of redemption of securities of the holding company rather than from income sources (i.e. the application of capital funds in payment of living and other personal expenses).

In certain circumstances a holding company formed for the purposes referred to above can also be used as a reservoir into which income can be allowed to flow free of tax. Such a corporate reservoir can be used to accumulate income until the owner wishes to withdraw it, at which time he can determine the extent of the income to be withdrawn in any year and so can control the amount of tax payable in any one year.

While the above methods of estate planning are applicable in a general manner in a substantial number of cases, care should be taken in each individual case to ensure that the plan selected will accomplish the desired objective. In particular, assurance should be obtained that any proposed program of estate planning will not founder on the numerous Sections of the Act which are designed to prevent various forms of tax minimization.



ELECTRONICS and the four A's

K. R. Patrick, O.B.E.

The four A's stand for the most important, the most dynamic forces in the period of development which we are just about to enter: AUTOMATION, ATOMIC ENERGY, AVIATION and AVIONICS. The present interest in electronics is simply the outcome of the growing realization that electronics is an integral part of these forces and in many cases the controlling part!

Here K. R. Patrick, President of Canadian Aviation Electronics, explains how electronics will shape our destiny, indeed, has already begun to do so; how it will do so in a world context, and more particularly in a Canadian context.

MANY of the developments which in other countries have taken their natural course, without too much discussion or awareness, have become points of issue in Canada. We have seen it in the case of the railways, a technological development which provided the basis for Canadian confederation and more recently in the case of the oil pipe lines.

In electronics we have again an issue of equal—if not surpassing—importance, for all the developments of the past, and all the developments of the future in the areas of the *four great A's* are connected by the one *controlling common denominator*: ELECTRONICS

Electronics

The operative word here is: CONTROLLING. Electronics stands for control. Whenever you hear the word electronics—think of control. This is true in the physical sense—the control of electrons; in the economic sense—the control of industries and industrial processes; and, as may be proven to you, in the political sense—the control of our future as a nation.

Electronics is radio and radar; it is television and telecommunications; it is computers and appliances; it is all these and many more. Basically, it means the opening of an era of unlimited communications and the absolute, calculated and instantaneous control of all machines, processes and operations. The main applications of electronics to date have been in the field of communications, the transmission of thought and data of many forms, in many ways. The main applications of the future will be in the area of the *acquisition, storage,* and *processing* of *data* and information in complex ways and on a vast scale, and in the *control* of actions based on the information so acquired.

Electronics is the great *"multiplication factor"* which will raise our human capabilities to a new and complex order. That is why the introduction of electronics into our life has brought with it reactions in so many fields seemingly remote from it: in the fields of *education* and *labour relations* for instance.

Before looking at the *effects* of electronics it may be well to take a look at the electron itself, and the qualities which make it something to be reckoned with. It has two most important characteristics; it has a very *small mass*, and it can move at almost infinite speed. It is possible to start and to stop, or to shift the direction and the rate of flow of electron streams many millions of times a second. Such instantaneous changes of motion *cannot* be attained by mechanical means.

By controlling the flow of electron streams not only is there an opportunity for displacing present controls over mechanical processes and motions through more economical means but—even more important—this is the only means of control over other electric and electronic devices which have themselves ultra-high speed characteristics.

It is only through the application and exertion of controls that all processes which mankind has developed and will develop, can be adjusted purposefully to mankind's use. The most advanced and sophis-

ticated means of control yet discovered with a potential for almost limitless applications in every branch of science and industry *is electronics.*

It seems certain that as developments in science proceed, the control of the electronics industry will tend to represent increasingly the control over the means of exerting control.

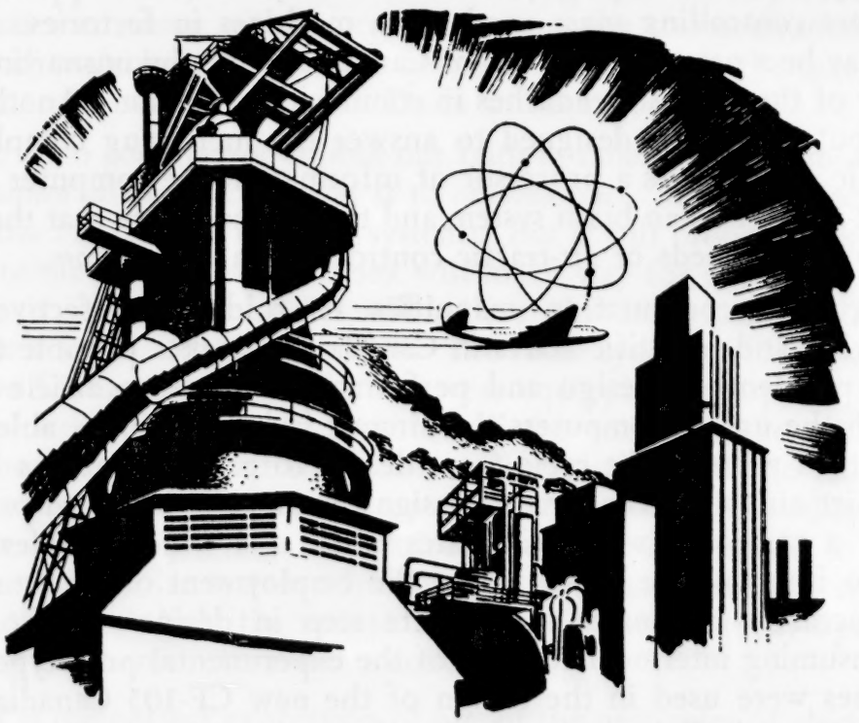
That is the central fact of electronics and from its self-evident importance springs the vital interest of governments and people in electronics as a science and as an industry.

With this definition of electronics as the all-pervading factor of control it is easier to understand clearly the first great "A"—AUTOMATION".

Automation

Automation is not new. It is simply that new electronic tools make practical automation on a grand scale and to a higher degree than ever before. Automation is more than mechanization. It is mechanization with something added, namely, *electronic controls* in the form of *sensing devices and computers.*

The continuous and automatic control of production which is made possible by the introduction of electronic computers into the production process opens up a new frontier for industry. We will be able to make new things. We will make them at less cost and to a higher standard



of precision. Correctly employed, automation may have relatively the same beneficial effects on our community within the next twenty-five years as the industrial revolution during the last two hundred and fifty. The human role in the age of automation will be to use the mind to *think* and to *create,* rather than the hands to "do". The level of skills will increase because a larger percentage of the total of employed persons will be creative teams of engineers, scientists and technicians. There will be shorter hours as man will gradually be released from routine tasks which the unimaginative though skillful machine can perform as well or better. Automation will make possible the more economical production of goods for the satisfaction of the needs and wants of mankind. At the same time it will liberate and provide the opportunities for the employment of mankind's energies towards the accomplishment of great intellectual advances.

Automation will take time. However, there are already noticeable changes in the industrial complex and these changes will accelerate in the foreseeable future. The key element in the modern concept of automation—the computer—is already employed in many varied fields. Recently various computers did an astounding job in presenting rapid analysis of the American elections so that in minutes every American knew exactly what had happened. For this election the data was presented hours more quickly with hundreds fewer personnel. And in addition, the computers gave accurate predictions of the final outcome.

Computers have an insatiable memory and versatility. They can not think, imagine, or create, they only do what they are told but they do it amazingly fast. Consequently, there are many industrial applications of computers controlling mass production machines in factories. A computer may be a great help for Trans-Canada Airlines by unsnarling ticketing, one of the biggest headaches in commercial aviation. Another form of computer is being designed to answer the increasing complexity of air traffic control. As a processor of information the computer is vastly superior to the human brain system and there is no doubt that the answer to the pressing needs of air-traffic control lies in *automation.*

Electronic computation magnifies ten-fold the effectiveness of engineering and scientific staffs in Canada and makes possible the solution of problems in design and performance *before* an article is built. Through the use of computers the aircraft industry will be able to save from 2 to 4 years in the cycle from design to production of a complex modern jet aircraft. The aircraft design can actually be tested *in advance* through a computer which simulates flight and which enables the designer to iron out the kinks. Here the employment of electronic techniques actually eliminates a complete step in design—the costly and time consuming intermediate stage of the experimental prototype. These techniques were used in the design of the new CF-105 Canadian Delta Wing supersonic fighter aircraft at a fantastic saving in time and cost.

A close relative of this electronic computer for design purposes is a device called an electronic flight simulator which is used for training on advanced types of aircraft. It simulates all the characteristics of a particular aircraft on the ground, in flight, even in battle. This simulation is so real that pilots in training have been known to pull the lever actuating the ejection seat when they found themselves in a "simulated" emergency. All the physical characteristics of the aircraft are translated into mathematical terms and all these data stored in a huge analogue computer. This computer then duplicates with great precision all the functions of the aircraft, allowing tremendous savings in training costs for the Air Force or for commercial airlines. These savings are of a very high order: 1/20th to 1/50th of the cost of operating the aircraft itself. But more important still, the "simulator" allows training that would otherwise be impossible, for instance, emergency procedures in high speed aircraft which if practiced in the aircraft itself would present the pilot with a *real* emergency.

The Royal Canadian Air Force has a policy similar to the United States Air Force, calling for electronic simulation of each new aircraft type. Most of the commercial airlines in the United States have adopted this practice and it is expected that Canadian airlines will follow shortly.

Aviation

The tragic collision between two airliners over the Grand Canyon in the United States emphasizes the close interdependence of electronics and aviation. Nobody asked: What was wrong with the airplanes? But rather, what was wrong with the control system; the *communication, radar and navigation devices*? The same question was asked in the case of the collision at sea between the Andrea Doria and the Stockholm.

There is no good reason to lose our faith in radar, which is to *aviation and navigation* what the *computer* is to *automation*... Much has been done to insure the infallability of radar systems. But it will probably take some time before the traditions of the sea will make way for the fullest use of this device . . . before human eyes will believe what is presented to them on the electronic retina: the radar screen. The radar systems with which both the Andrea Doria and the Stockholm were equipped are capable of presenting the bridge with a clear picture of the vessels in the area, even the light-houses, buoys and coast lines. Should either of the radar systems be inoperative, this would be known immediately so that they could not and would not provide false information. It is possible to add a small box to the radar system which would act as an automatic reflex—bypassing the weak link, the human element, by automatically operating the steering mechanism to avoid a collision.

Radar is the perfect expression of one of the new roles of electronics. Electronics meant at first the swift and certain *transmission* of data, for

instance, of spoken messages. Today, electronics has taken over the task of *collecting* data, of multiplying manyfold the data collecting ability of the human faculties, of sifting and sorting them and of presenting them in a form on which decisions can be based. Here again we have to call on the computer to help us make the decisions since our brain—in many cases—is not able to keep up with the data presented to it by the radar systems.

Radar—today—takes many forms, both civil and military. It guides aircraft to runways in bad visibility, it fires guns, rockets and missiles, and it builds invisible fences against an invader. The constructon of three of these fences on Canadian soil, the Pinetree, Mid-Canada and DEW line makes Canada, in partnership with the United States, a world leader in the use of electronic devices and techniques. These systems, by themselves, appear as an enormous effort and investment. However, they are only a beginning, a part of an overall electronic atmosphere for all North America. The next phase of this overall system, known as "SAGE"—Semi-Automatic Ground Environment—will consist of all the radar defence lines in Canada, in the United States and along the flanks of our continent, those existing and those yet to be built.

SAGE will be an all embracing data collector, feeding its information into a computer system which, in turn, will trigger guided missiles or instruct interceptor aircraft. Within the next ten years the Canadian installation of this automatic electronic atmosphere will probably cost two billion dollars, while the United States will probably commit 8 to 10 billion dollars.

Some distinguished retired Canadian generals have expressed the opinion that this program is something less than "SAGE", in fact they have compared the system of warning fences to the Maginot Line. The comparison does not apply. First, the Maginot Line was conceived as an object of attack. Our air defence system and lines have not been built with the expectation that they would be destroyed. Such systems, because of their comprehensive netting and vast dispersions are unrewarding targets for attack. General Gruenther, until recently the Supreme Commander of NATO used the expression: "The Sword and the Shield". The "Sword" is the retaliatory force, the U.S. Strategic Air Force. The "Shield" is the protection of this force, the warning systems, air defence, fighter aircraft. The Radar Shield will give the Strategic Air Force sufficient warning to become airborne; it will enable us to blunt the attack; it will support the retaliatory forces.

The Strategic Air Command long range atom bombing force is the principal deterrent to a 3rd World War today. The radar systems in Canada, defending not only Canada and the United States, but also this vital element in allied air power contributes in a major way to this effective deterrent. Rather than being a subject of criticism, the substantial

progress toward completion of these systems should be recognized for the great strength they give to the free world. Without a thorough basis for air defence on the ground no meaningful operations can be conducted in the air at all.

Secondly, DEW, Mid-Canada, and Pine Tree, as well as the additional RCAF radar and communications systems should not be compared with expendable fortification lines such as the Maginot line, but rather with railroads and airports and highways, even with the St. Lawrence seaway. These systems will not be abandoned even if the danger of attack should recede. They and their vast communication chains will endure and become part of the overall economic fabric of our nation. While they are today identified as military only, they will increasingly fall under civilian control. In the military sense they are effective even now, for while not yet fully operational, neither are they quiescent.

The Mid-Canada Line opened formally on January 1st and the DEW Line is due on June 1st, 1957. The Mid-Canada Line is an all-Canadian effort, Canadian management, money and staff. The DEW Line, said to have cost more than double the Mid-Canada Line, over 400 million dollars, is American. With all this talk of military aircraft the needs of civil aviation are sometimes obscured. This year, the world's airlines will carry more than 80 million passengers—many of them over Canadian sovereign soil. Commercial aviation has committed over 3 billion dollars for new jet airliners to be delivered during the next 3 or 5 years. A substantial part of commercial aviation will be nullified by increased hazards.

Such an electronic program for aviation may seem huge when looked at separately . . . but as an indispensable part of aviation progress the expenditure takes on the aspect of a necessary investment which will bring substantial returns. The Department of Transport has shown courage and leadership in planning for the early installation of surveillance radar covering all airports and principal airlines in Canada. This is but a first step towards a comprehensive system.

The modern aircraft is a flying electronics laboratory floating in a sea of electronics. This is true of both commercial and military aircraft. For example, the electronic equipment in the Royal Canadian Air Force all-weather fighter, the CF-100 costs nearly $150,000, about 5 times the cost of a completely equipped World War II Spitfire. The new Canadian fighter aircraft now under development, the CF-105, probably the last of a great line of inhabited aircraft, may have electronics costing more than $200,000. In it the crew will take on the role of monitors of electronic automatic controls, a development which leads straight into the area of the third great "A" already referred to, AVIONICS.

Avionics

Avionics is one of those newly coined words and results from the marriage of Aviation and Electronics . . . a relationship in which Electronics takes on more and more the role of the senior partner.

Avionics basically means guided missiles. From 50% to 75% of the money spent for the design and construction of a guided missile goes for electronics. Within the next few years, when the inhabited aircraft as we now know it will become obsolete, guided missiles will make electronics the major factor in our defence. The percentage of electronics is increasing constantly in the weapons of offence and defence, in the air and on the ground. Ground-to-air and air-to-air guided missiles are even now integrated into our defensive system. In 10 years, perhaps, the long range bomber will be superseded by the renowned intercontinental ballistic missile—the "ICBM" as the basic weapon of offence.

The major problems to be solved do not concern the frame or the fuel—they are not aerodynamic or propulsion problems—they are *guidance* and therefore, electronic problems. An error of only 1 degree in guidance at 5,000 miles works out to an 80 mile miss. Improved electronic techniques will reduce this error to pinpoint accuracy over the next few years. At the same time, electronics will produce a *defence* against the ICBM which may take the form of electronic interception by electronic counter-measures. Electronic counter-measures, "ECM", designed to confuse the enemy radar, communication and guided missile devices are emerging as more and more important in defence planning.

A second quite logical technique in the electronic military chain is making its appearance in the form of electronic counter-counter-measures, or ECCM. ECM versus ECCM . . . here you have the shape of our future preparedness pattern.

A thorough appraisal of all these developments leads to only one conclusion. Future conflicts may be won or lost in the electronics sphere. Therefore, the highest expression of military superiority will be superiority in electronics.

Atomic or Nuclear Power

Electronics, to repeat our definition, essentially means control. Control is the indispensable link between the forces *available* in the atom and their *utilization* for our purposes.

Electronic devices have made possible the practical solution of the problems of atomic energy for both peace and war, beginning with the geiger counter and scintillometer used by the prospector in locating radioactive minerals to the complete and detailed control of giant reactors producing fissionable material. Each step is an electronic step,

with computers and counters solving ponderous problems, with closed circuit television permitting the constant surveillance of areas dangerous or deadly to human beings. Already the combination of radioactive and electronic techniques have produced a whole series of new, so-called nucleonic devices, useful in industry, medicine and agriculture.

In Canada, the annual gross electronic product is now around one quarter of a billion dollars. We can expect this to increase to an annual figure of three quarters of a billion within the next ten years and in 15 years we will be well past the billion dollar mark.

This is not a very daring prediction. It takes in all the developments in the Consumer Products field—developments which have been expressed in the slogan: "Push Button Living in the Home". Canadians today have more than two and a quarter billion dollars invested in—we might say—*old line* electronic products.

The *new* electronic wave will be represented by electronic stoves, which will cook frozen foods from the electronic deep freeze ready to be served in two to three minutes; by electric washing machines and dryers as a five to six minute automatic home laundry; by electronic air conditioning, a non-mechanical electronic climate control for every home. The transistor—replacing the conventional electron tube will eliminate the power cord from many home devices and the cartoonists may have to look for new material when the "auto driver" takes over from the housewife and her male antagonist behind the wheel. Electronic controls for highways—at least for the most travelled ones—are a distinct possibility, providing safe and automatic travel to any selected point.

There is hardly any field of social organization or daily living which will not provide a market for electronic goods and techniques. We have witnessed the impact of television—which in its present form has become a significant social force. Its influence will even widen the intercontinental television—which will be with us in a few years.

There is therefore no reason for concern if we consider the *possibilities* of expansion for the industry—based on developments in the industrial, military and consumer products fields. There is, however, a definite reason for concern when we look at the *structure* of the electronics industry in Canada. The predominantly foreign control brings with it a number of serious consequences. It reduces the scale of development projects and thereby, the opportunities for Canadian engineers. It probably increases the percentage of electronic goods purchased outside of Canada. Without question it reduces the export opportunities which would be available for a more Canadian-oriented industry.

Foreign companies have made tremendous contributions to electronic know-how and development in Canada. Their continued operation must be welcomed as an impetus to maintain a high standard of technical knowledge and as the spur of competition. But there must be a sizeable part of the Canadian electronics industry relatively free of foreign control if the industry is to export and if it is to fulfill its role so fundamental to our future as a nation.

It is distinctly possible to develop Canadian oriented companies, carrying out Canadian oriented policies, with the help of foreign investment, if this investment is available and desired. A Canadian oriented policy is necessary if the burgeoning world markets are to be shared by the Canadian electronics industry. These potential markets for electronic products are tremendous and a relatively small share of them could easily amount to many times the total Canadian electronics business today.

The export potential for electronic products is shortly to be given a tremendous though unsuspected stimulus resulting from the practical production of the transistor which, because of its extreme efficiency, makes it possible to think of huge exports of "transistorized" radios to under developed countries *before electrification.* For the first time in electronic history the power requirements of a radio receiver are so small (a couple of flash light batteries for a year) *mass communication* via transistorized radios is possible in the Middle East, Asia, and South America, 85% of which is still lacking electrification!

The problem confronting the underdeveloped nations is that of catching up with technology not as it was—but as it will be. Electronics and the four great "A's" have given an entirely new meaning to what is up-to-date. While it may have been progressive yesterday to think only in terms of roads and dams, this same thinking today may leave out some of the major factors which alone will determine whether the underdeveloped countries will catch up with the advance in modern technology.

It may seem absurd to advocate the building of communications networks, of television stations and other means of mass communication in countries where there are areas without even the most primitive means for exchanging goods or ideas. Yet electronics have given us precisely the instrument for overcoming in one giant forward step the accumulated obstacles of centuries. Surely Canadians—who are themselves opening up their vast northern territory through the employment of the most advanced transportation and communication techniques—will be able to communicate their experiences so that they can be employed by other members of the Commonwealth.

In the race for the future support of the present underdeveloped areas of the world, a race which may well determine the survival of the

democratic concept of life, electronics can play a twofold role. First, it presents us with an opportunity to make possible an exchange of ideas and to help under-developed countries in the education of their peoples through the employment of the most modern techniques, such as television and radio. Secondly, it will help them to take advantage of the most decisive developments of our age in the fields of the four great A's.

Summary

Canada, by virtue of her great size, the abundance and diversity of her natural resources, the early state of her industrial growth and the smallness of her population, stands to benefit, more perhaps than any other nation, by the four great A's of the future.

It, therefore, has a startling logical cause for seeking to develop and to exploint the great potential of electronics, *so basic to all four of them.*

The means of overcoming the political, economic and cultural disadvantages of distance, while retaining the advantages, of improving efficiency and increasing vastly the per capita output of her limited population, of minimizing the hardships of season and climate on people and equipment, of enhancing her military and social security . . . all are capable of attainment through the rigorous, early and broad development of electronics . . . and only through the means of electronics.

European Free Trade Area

President of the Federation of British Industries, Sir Graham Hayman, said:

"If we refuse to associate ourselves with this plan we run the risk of a serious degree of exclusion from a great and growing market on our doorstep, which in time might also develop into an increasingly potent competitor in Commonwealth and other markets. At the same time our links with Commonwealth countries, which are of great importance to many industries and represent in total one-half of our exports, cannot be sacrificed . . .

"Whatever we decide must be largely an act of faith, but, even so, must be based on certain positive considerations. I see no reason why, technically, this country should in general fear competition; our skill and craftsmanship are still at least equal to the best. But industry will require assurances from the Government, if it is decided to enter the free trade area, that suitable safeguards will be laid down against trade practices which might unfairly hamper our efforts. We must see to it that, if we are asked to compete in a free trade area, we do so on equal terms."

the DISCOUNT house

D. S. R. Leighton

ONE day last November, a recently-married Toronto couple went shopping for appliances for their new home. After touring the appliance departments of the big downtown stores, they ended up at a cramped, one-storey "discount house" on a busy east-end street. There they purchased an 11.5 cubic foot automatic defrosting refrigerator ($300), a full-sized electric stove ($250), deluxe automatic washer ($225) and matching clothes dryer ($200). The appliances were all brand-new, first-quality merchandise by one of the largest and best known manufacturers in the industry, and each bore the manufacturer's full warranty. The appliances were delivered to the couple's home, and the sale was financed by the retailer at regular finance company rates. The total bill, exclusive of financing charges, came to $975. The downtown stores had quoted the suggested list prices, or $1,400, for the identical merchandise.

This is just one of many similar incidents that are taking place with increasing regularity in Canada today. There is scarcely a Canadian city that does not harbour at least one self-styled discount house or "appliance supermarket". Depending on whom you talk to, these discount houses may be described either as knights in shining armour riding to the relief of the the overburdened consumer, or as "bootleggers", "parasites", and "vampires" sucking the lifeblood from the honest merchants of the community.

Canada has yet to feel the full impact of the discount house revolution as it has been experienced in the United States. But the same conditions that have enabled the discount house to emerge as a major force in that country also exist in Canada, and it should be only a matter of time before this trend becomes more clearly defined. While the appliance industry will likely be most directly affected, U. S. experience indicates that the impact of discount selling will be felt throughout the whole field of consumer household durables, including furniture, floor coverings, housewares, jewelry, sporting goods, photographic equipment, leather goods, hardware, toys and records. Not only have discount

houses revolutionized merchandising and promotional policies of retailers in these fields, but they have also wrought significant changes in the marketing strategy of both manufacturers and distributors.

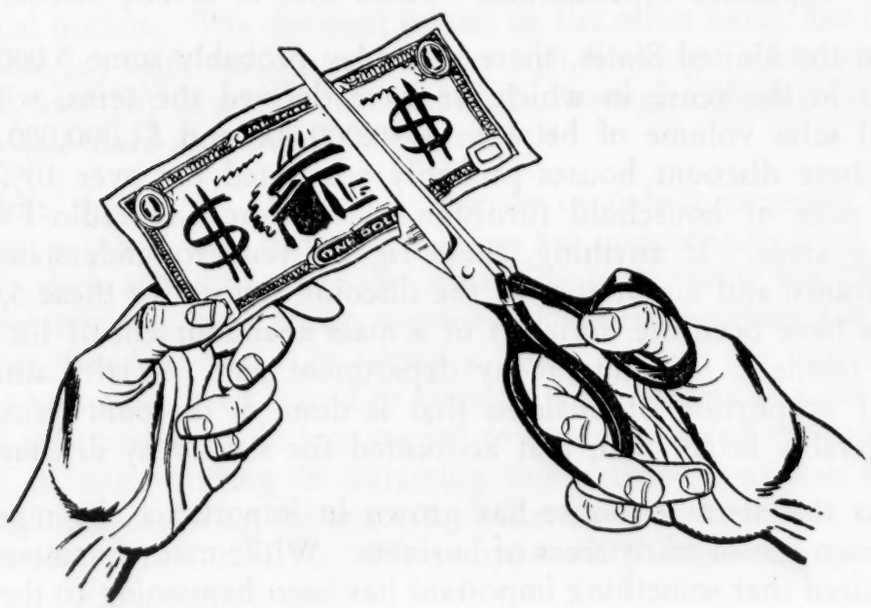
What is a Discount House?

When people talk about discount houses, discount selling, or discount operations, what do they mean?

There seems to be general agreement that a discount house is a retail business, i.e., it normally sells directly to the ultimate user of the product. Thus a wholesaler who sells to a relatively few friends and relatives at the wholesale selling price is not a discount house in the strict sense.

The discount house obviously must sell at a discount. But this concept is not as simple as it appears. A discount for what? Is a markdown a discount? Is a low-grade, low-price store a discount house because it sells for less than other stores? Or is a store that features special purchases and special sales a discount house? Generally, the term "selling at a discount" seems to be equivalent to taking less than the customary percentage markup on goods. It also implies that the low-markup policy must be a year-round, store-wide practice, not just a special purchase or markdown. To most people, there seems to be a further association between the term "discount house" and the merchandising of certain consumer durable goods, usually either electrical appliances or gift items of various sorts — jewelry, luggage, silverware and the like.

It is one thing to lay down a definition of a discount house, and another to draw any clear-cut line between "discount" and "orthodox"



outlets as they exist in real life. Many firms that meet the above definition of discount houses strongly object to having that term pinned on them. "Frankly," said one such merchant, "I am at a loss to understand where our so-called 'discount' operation differs from other stores which aggressively merchandise furniture and appliances." He had a valid argument—there was little or no visible difference between his operation and the comparable departments of the local department stores. Prices were competitive, similar lines were carried, physical displays were attractive in each case. All offered credit, free delivery and installation on major items, and all maintained their own service departments.

Actually, discount selling, or "getting it wholesale", embraces a wide variety of activities. Some wholesalers, for example, sell goods to friends, or friends of friends, at less than suggested list prices. Many firms offer special discounts to their employees or to special groups such as ministers, teachers or the like. Building contractors sometimes purchase major appliances direct from the manufacturer and install them in new homes they build at cost plus handling charges. In the U. S., another form of discount selling has been the "Club Plan", whereby a group of women are organized into local branches of a club, pay dues, and in turn can purchase merchandise at discount prices from the club's central organization. Such organizations are not, strictly speaking, discount houses but they are none the less of considerable importance in the distribution of household durables.

The Importance of Discount Houses

There is little public information as to the extent and importance of discount houses in Canada. It has been estimated that in Metropolitan Toronto some 75% to 80% of electrical appliance sales are made by six major "appliance supermarkets" which are, in effect, discount houses.

In the United States, there are today probably some 5,000 discount houses in the sense in which we have defined the term, with a total annual sales volume of between $750,000,000 and $1,000,000,000. All told, these discount houses probably accounted for over 10% of total retail sales of household furnishings, furniture and radio-TV in their trading areas. If anything, these figures tend to understate the true significance and importance of the discount house, for these 5,000 retail outlets have been the initiators of a mass abandonment of list prices by other retailers, including many department and specialty stores. The overall proportion of business that is done at discount prices thus is considerably larger than that accounted for strictly by discount houses.

As the discount house has grown in importance, its repercussions have been felt in many areas of business. While many businessmen have recognized that something important has been happening to the retailing

structure, in many cases they have not clearly seen either what was happening or the significance of these events. They have not understood the forces in the market place that gave rise to discount houses, and in many cases they have mistakenly dismissed the rise of discount houses as a fad or short-run phenomenon that would soon vanish. On the contrary, in the author's opinion, the growth of discount houses represents one of the most significant recent trends in retailing, and is a symptom of the failure of our traditional retail outlets to keep pace with the changing market for their goods and services.

How Do Discount Houses Operate?

The essential appeal of the discount house is based, of course, on low prices.

Retail stores have a variety of devices at their disposal for attracting customers. Some stores have been founded on the policy of offering a wide *variety of merchandise,* others on having *complete stocks* of a certain type of merchandise. Some stores have offered a great many *supplementary services* such as charge accounts, free delivery, installation, repair service, liberal returns and the like. Still other stores put stress on *shopping convenience* through their location, store hours, physical plant and facilities, and sales assistance provided by their peronnel. *Advertising and promotion* are additional devices used by a great many retail firms. And finally, of course, customers may be attracted by the appeal of *low price.*

The low price appeal is the main appeal of the discount house. Department stores and appliance stores in general have typically based their appeals on the non-price selling tools such as variety, complete stocks and liberal services. The stress on non-price selling has, in turn, implied low stock turnover and relatively high overhead costs for our traditional outlets. The discount house, on the other hand, has typically strived for (a) high stock turnover, through limiting variety and depth of stock, and (b) low overhead expenses, through offering only those services that were absolutely essential.

While the ability of discount houses to reduce expenses through increasing turnover and trimming services has undoubtedly been a major factor in their success, by far the most important factor has been their ability to attract volume. The expenses of a retail business are, for the most part, fixed in total. In taking a lower markup per unit sold, the discount house has been forced to attract a large volume of sales in order to yield the number of dollars needed to cover the fixed expenses. The potency of price cutting in attracting this necessary volume has been amply demonstrated by the success of the discount houses in operating at gross margins of 12% to 22% as opposed to the 34% gross margin of the typical appliance store.

Traditional retailers have frequently assailed discount houses for selling only fast-moving items, or for not providing services. It is certainly true that, in general, discount houses only sell fast-moving items and will not provide the kind of selling so necessary for the promotion of relatively new and untried products. This is true to some extent also of the supermarket chain in the grocery field, and there is a place in our economy for the store that does promote only the fast mover.

The other charge frequently heard is that discount houses provide few if any services. In a sense, this also is true. Many of the discount houses do not themselves perform the repair service, carry the instalment credit, or perform the actual delivery. In many cases, these services are either performed by the distributor, or, in the case of instalment financing, are let out to a specialized finance agency. The discount houses thus concentrate on performing the functions of merchandising and promotion. As one merchant put it, "I'm in the business of selling merchandise, not in operating a credit bureau or a fleet of trucks. I'll make sure these things are available for the customer, but is there any reason why I should have to perform them myself?"

In most discount houses observed by the author the customer could readily obtain any of the essential services, just as he could in a department store. The main difference was that in the department store the services were performed by the store, and in the discount houses they were provided by a specialized agent. The discount houses did, however, offer fewer services in the sense that they seldom provided charge accounts, or lay-away plans, and were less liberal in accepting returns.

To recapitulate, then, the discount house's success has been based primarily on two factors:

1. Its ability to attract large volume through low retail prices; and

2. Its ability to maintain a high rate of stock turnover and to keep supplementary services at a reasonable minimum.

Other devices such as shopping convenience and advertising and promotion have also been used effectively by some discount houses, but others have operated successfully using the price appeal alone.

Reasons For The Growth of Discount Houses

Earlier the author stated that the success of the discount house has been symptomatic of the failure of our traditional retail outlets to keep pace with the changing market for their goods and services. What have been these changes, and why have the discount houses been successful in meeting them while the traditional retailers have not?

The growth in importance of discount houses is but one manifestation of several basic changes that have taken place in the Canadian and U. S. societies. Principal among these changes has been the growth of a large middle-income class, accompanied by a tremendous change in the size, location and character of our population. These basic social movements have transformed America's markets and given rise to consumer buying patterns vastly different from those of the 1920's or 1930's.

In business, it is axiomatic that consumer buying habits determine suitable marketing strategy. The changes in our society and in its buying patterns have called for changes in marketing strategy. But our traditional marketing institutions have lagged in adjusting to the changed and changing markets. Into this void thus created have come the discount houses and other such institutions.

The changed buying patterns that have directly influenced the growth of the discount house include:

1. The growing market for consumer durables. Clearly, the expanding nature of the market for such products has attracted new and vigorous merchants to the field and made possible large-volume retailing operations.

2. The opportunity for new firms to enter the industry and compete effectively. Barriers to entry in terms of technical know-how or financial resources have been relatively few.

3. Changes in the nature of the retailing job, plus the reluctance or inability of many established firms to change their marketing strategy accordingly.

The Growing Market For Durable Goods

The growth in the market for such consumer durables as electrical appliances has been one of the features of marketing in the last decade. In this remarkable growth of this market, certain underlying factors stand out:

1. *The Rise of the "Rich Middle-Income Class"*

The rise of this class greatly expanded the market for household durable goods and thus provided the basis for large-volume marketing and selling at the retail level.

2. *Shifts in Population*

Population distribution has become more heavily weighted towards the very young and the very old age groups. Our population centres are shifting to the suburbs, and living habits and customs have changed correspondingly.

These shifts of population and changes in living habits have further expanded the market for household durables. The baby-furniture industry, for example, has enjoyed a tremendous boom since World War II. Outdoor living has brought a host of new products and so has the so-called "do-it-yourself" trend. Accompanying these developments, has been the disappearance of domestic servants. The housewife, faced with raising a family and doing the domestic chores herself, increasingly needs labour-saving devices such as dryers, dishwashers, disposal units and the like.

3. *Emulation*

Durable goods, including appliances seem to have gained increasing social acceptance. Put another way, we might describe this as the overcoming of people's distrust and hesitancy towards the new. As more and more people own automobiles, refrigerators, ranges and automatic washers, so the acceptability of these products to the more conservative consumers increases.

4. *Product Improvements*

Product improvements, better styling and sometimes lower prices enhanced the desirability of many products. Washers became automatic, were then mated with dryers to do the whole washing-drying job automatically. Refrigerators suddenly sprouted freezer chests, automatic defrosting, and roll-out shelves. While all these improvements were being added, servicing problems on many appliances, notably refrigerators, were reduced to a relatively low point.

5. *Changed Attitudes Towards Spending and Debt*

Apart from, but coinciding with, the rise of the middle-income group as the new mass market, are changed consumer attitudes towards spending incomes. The old fashioned virtues of saving and thrift are soft-pedalled; the consumer is loosening his p u r s e strings. Through an extraordinary expansion of consumer instalment credit the consumer has been able to buy many things that were previously out of reach.

6. *Advertising*

Another factor has undoubtedly been the cumulative effect of advertising of household durables, including appliances. It has performed an educational role in describing new developments and features, and reduced certain psychological barriers to buying by reducing fear of the unknown and creating a brand image of quality and trust-worthiness.

Thus, the increased discretionary incomes of a growing middle-income group, and increased needs arising from new modes of living have contributed substantially to the growth of the consumer durables market. Moreover, a possible more liberal attitude toward spending and debt has apparently been accompanied by increased social acceptance of household durables, especially appliances, as a suitable object for the family's spending. In part, this increased acceptance may be due simply to increased incomes generally. But there also appear to be other factors relating more directly to emulation; the increased trial and use of certain household durables over time; innovations and new features, and the cumulative effect of advertising. Insofar as these factors help explain the growth of the market for durable goods, they help explain the rise of the discount house.

The Opportunity For New Firms to Compete Effectively

The changing, expanding market for household durables helped give rise to a situation where the small, aggressive merchant could enter the market and compete very effectively with older-established firms. The attractiveness of the household durable-goods trade was a result of the tremendous growth of the industry and the fact that the trade was easy to enter. There were relatively few financial or other barriers to the prospective retailer.

In the case of many discount houses, the founders of the business were young, aggressive men with boundless energy but limited resources in terms of capital, education or experience. All that was required, in a physical sense, was a small amount of capital, and often a connection or source of supply.

In *personal* terms, requirements for entry were low, for a number of reasons. The retailing of household durables, like many other retailing fields, was characterized by relatively small retailing units, and there were no strongly-established, dominant firms. It was a business in which aggressiveness, some merchandising skill, strong promotional skills, and knowledge of local conditions were tremendously important for success. Administrative skill and education were relatively unimportant, at least at the founding stages. Previous experience in the field appeared to be of some benefit insofar as it provided "connections" and sharpened merchandising skills, but not essential. More important were boundless

energy, a willingness to take a risk, and a "feel" for what consumers wanted and would respond to in terms of merchandise and promotional devices. Even merchandising skills were less important than in many industries because of the relatively standardized nature of products and the ability to buy hand to mouth without seriously hurting sales.

Capital requirements were also relatively low. Would-be retailers of household durables did not need large amounts of funds in order to get into business. No large plant or vast amount of fixtures and equipment was necessary. Such supplementary services as had to be offered could be let out to specialized agencies. Inventory requirements were not exacting, because of the proximity of the wholesaler; the availability of excellent catalogues and large showrooms maintained by distributors, public utilities, and others; and the correspondingly high rate of stock turn. After 1950 or 1951, when the seller's market changed to a buyer's market, the ready availability of merchandise from distributors and manufacturers further reduced the need or desirability of buying ahead, made credit more available on the buying end, and enabled some retailers to shift the burden of carrying inventory almost entirely to the distributor.

Thus from two standpoints, the household durables trade was relatively easy to enter—little training was required, and also relatively little in the way of funds. The ease of entry plus the expansion in the market resulted in the influx of many firms following the war.

Changes in the Nature of the Retailing Job

The changing market for household goods called for changes in distribution and marketing strategy; the strategy appropriate for selling appliances in the 1930's was no longer appropriate in the 1940's and 1950's. Discount house selling methods have, as a rule, been more closely attuned to the needs of the market than have the selling methods used by other retail stores. In the simplest terms, an emphasis on price was called for. Discount houses saw this and provided the required emphasis. Hence they prospered.

In the 1930's distribution channels for electrical appliances, particularly major appliances, were set up to do an aggressive selling job to a relatively narrow, "class" market. Selected retail outlets were franchised with the objective of obtaining push at the retail level. Cooperative advertising funds were set up and copious promotional material distributed to help the retail dealer overcome consumer resistance. Volume was relatively low and unit margins high to allow for the high costs of making a sale.

In this period, demand for such products came largely from the "class" market—the high income groups to whom price was little object. Total demand was relatively inelastic, and marketing efforts were direct-

ed mainly at increasing primary demand. Success in selling to this market called for emphasis on the service, sales, promotional and merchandise elements of the retailer's marketing mix. Manufacturers had to win consumer confidence in, and acceptance of, their products.

With the rise of the rich middle-income market in the 1940's, consumer resistance to certain large appliances vanished, helped along by significant product improvements. By the 1950's, refrigerators, ranges, automatic washers and the like were no longer luxuries for the few, but were necessities for the many. What had been specialty products requiring aggressive selling suddenly became staples which to a considerable degree sold themselves to a large and expanding new class. The old marketing programs set up to do a tough primary selling job were no longer appropriate for the changed market, where the problem was not one of convincing the consumer to buy but of getting the product he wanted to him at the least possible cost.

The market conditions of the 1950's called for a primary emphasis on the price element of the retailer's marketing mix. The promotional burden was shifted in considerable part to the manufacturer, and the service provided by the individual retailer became of considerably less importance in the overall mix.

In this changing market, most traditional outlets were slow to adjust their marketing policies, preferring instead to stress service and not price. The discount house, with its primary emphasis on price, thus grew up in response to consumer's needs and desires.

Frankness About Finance

A paper read recently at the conference of the British Institute of Management suggests that British industry still has a long way to go towards taking workpeople into its confidence. The paper, based on a survey, suggests that less than one-fifth of British companies provide their employees with financial information (though the proportion, fortunately, is increasing), and that most of them limit themselves to the annual report and accounts. The survey throws up another fact, which is relevant enough to its main conclusion. Although employees on the whole are interested in having financial information about their company, senior staff (at the firms in which the survey was held) do not seem to have a conspicuously better grasp of company affairs than the average employee.

It suggests strongly a failure to bring not only workpeople as a whole but more of the intelligent and responsible employees into sympathy with the affairs of the company they work for.

—Robert Collin, FBI Review

FORECASTING Canada's CAR Market

Godfrey E. Briefs

The appraisal of future markets has always been an integral part of management's planning function. Both year-to-year production scheduling and long-range planning of plant capacity hinge on the outcome of such appraisals.

In view of lengthening forward planning periods associated with continuing vertical integration of firms and the further development of mass production techniques, managements in large companies have found it desirable to entrust market studies to specialists. Here Dr. Godfrey Briefs, General Motors' economist at Oshawa, brings to bear upon the problem numerous methods derived from the field of economics, statistics and population studies.

IT is our purpose here to examine some of the major tools of the business forecaster's trade and to define the most important technical terms in current usage. Since we cannot study all of the ingenious devices which analysts in different industries are apt to employ, we will confine ourselves to the methods and problems of general business and sales forecasting in the automobile industry.

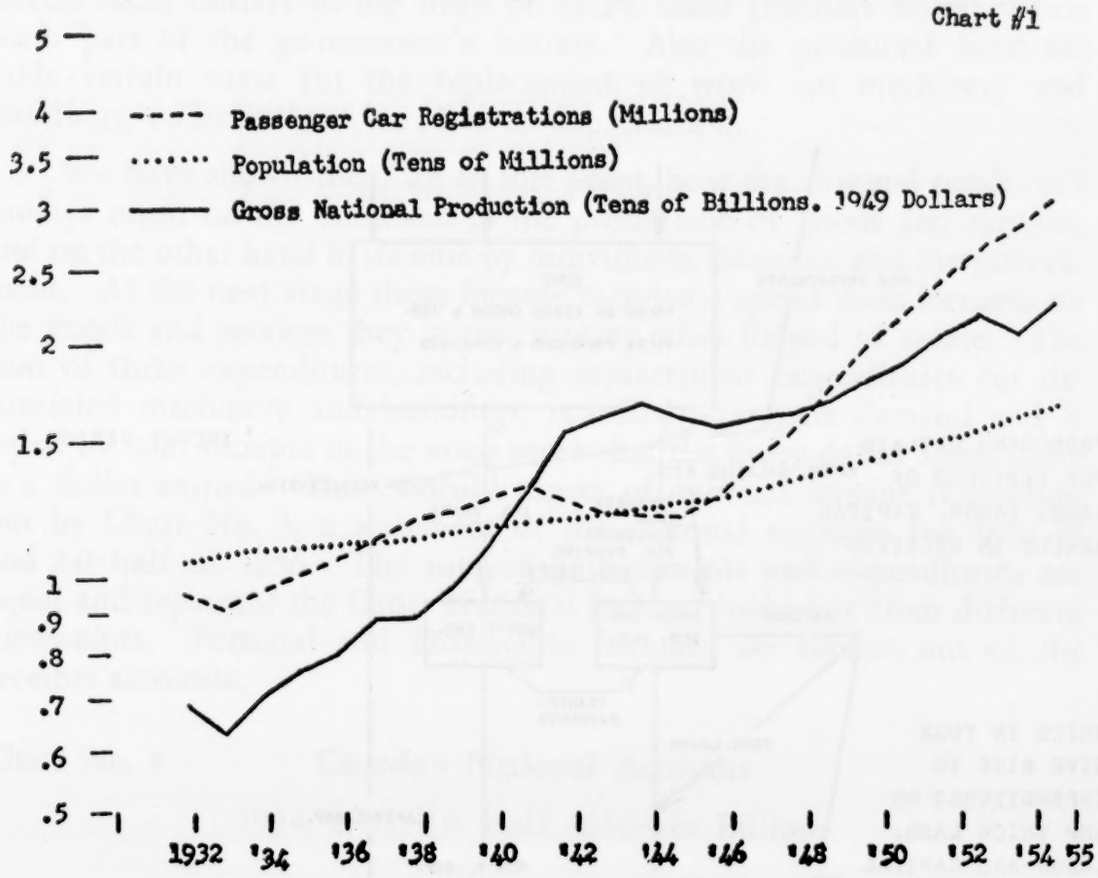
Before proceeding we should mention that successful forecasting rests on (a) the stability of certain relationships over time, and (b) the accuracy of the assumption that future events have their beginning in the present and in the past. Random events cannot be forecast.

Keeping these axioms in mind we now address ourselves to the question, which are the major factors that govern the level of demand for cars and trucks? We know the answer both from common observation and from a study of the statistics.

Chart No. 1 shows that Canadian car registrations in the past have grown roughly with total national income and with population. In

Relative Growth of Canada's Population, Income & Passenger Car Registrations

Chart #1



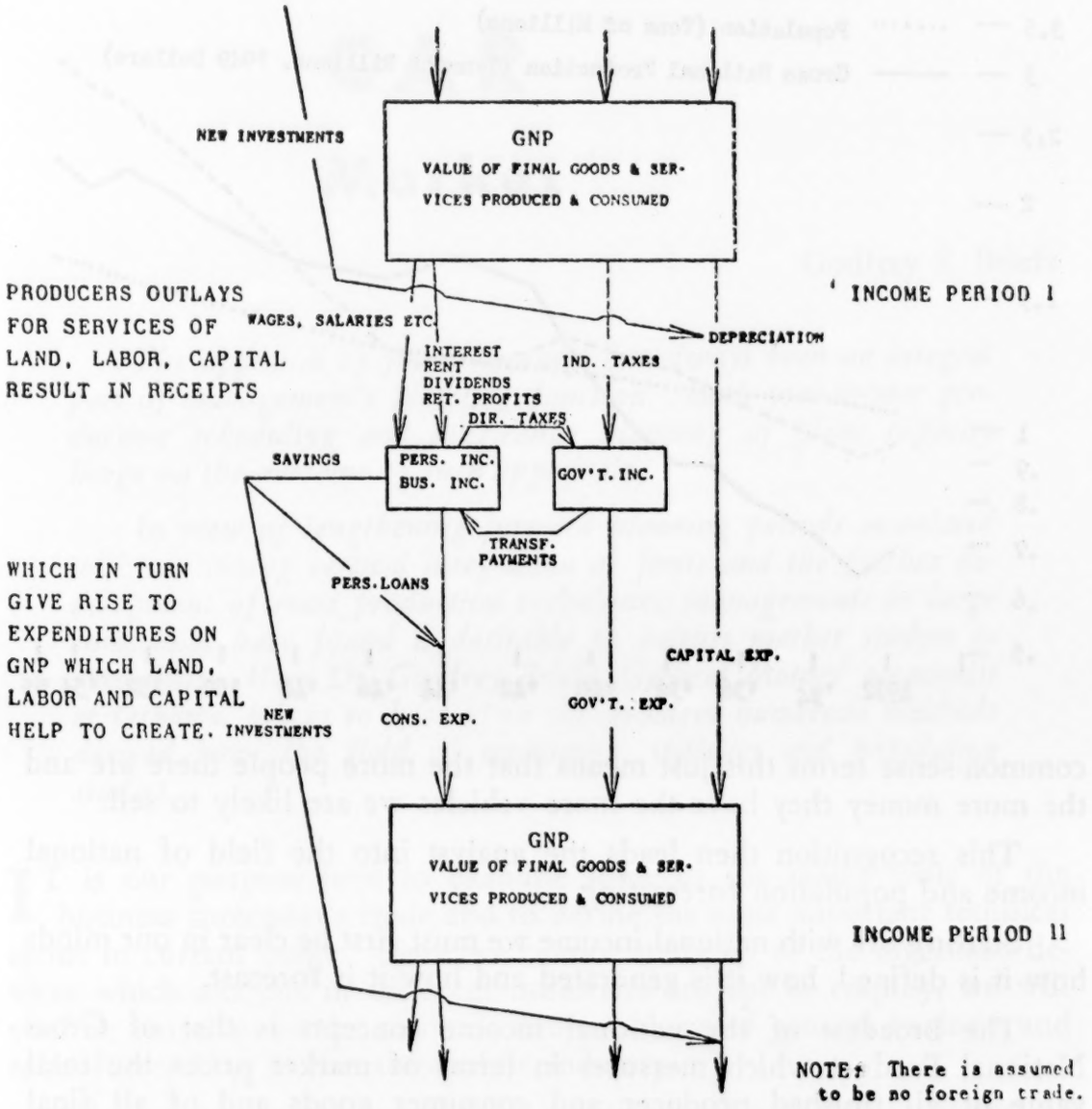
common-sense terms this just means that the more people there are and the more money they have the more vehicles we are likely to sell.

This recognition then leads the analyst into the field of national income and population forecasting.

Starting off with national income we must first be clear in our minds how it is defined, how it is generated and how it is forecast.

The broadest of the national income concepts is that of Gross National Product which measures in terms of market prices the total value of all finished producer and consumer goods and of all final services which are created and consumed during a calendar year. Somewhat narrower is the meaning of the term Personal Income which excludes depreciation, indirect taxes and undistributed corporate income. Differently defined it includes, before tax, incomes received by persons and unincorporated businesses in the form of wages, interest, rentals, dividends, relief payments, bonuses, commissions, and the like. The exclusion of income taxes from Personal Income gives us a still narrower concept called Disposable Income. This last concept is of special interest to us in the automobile business, since it represents the uncommitted income of consumers, that portion of his income which he is free to spend on food, clothing and shelter—and on transportation.

Chart#2



Our next question now is how is this national income generated. Chart No. 2 gives a simplified version of the economy, assuming that there is no foreign trade. As the diagram illustrates, at the beginning of an income period (for simplicity's sake we pretend that the economy operates not in a continuous but in a pulsating fashion) the producers in the economy make certain outlays for the hire of land, labour, and capital which they employ for the creation of all those goods and services, the sum total of which we call Gross National Product. These outlays result in incomes which may be called rentals (for the services of land and buildings), wages, salaries, commissions (for the services of labour),

dividends, interest (for the services of capital). In addition the producers incur outlays in the form of excise taxes (indirect taxes) which form part of the government's income. Also the producers must set aside certain sums for the replacement of worn out machinery and buildings, collectively referred to as depreciation.

We have shown then, up to this point, how the original producer's outlays result on the one hand in the production of goods and services, and on the other hand in income by individuals, business, and the government. At the next stage these income recipients spend their incomes on the goods and services they in one way or other helped to create. The sum of these expenditures, including replacement expenditures for depreciated machinery and buildings, is called aggregate demand and is equal to total receipts in the same sense that for every dollar spent there is a dollar earned. This twofold aspect of national income is brought out by Chart No. 3, a statement of the national accounts for 1954-55 and 1st half of 1956. The sum of both receipts and expenditures are equal and represent the Gross National Product looked at from different viewpoints. Personal and Disposable Incomes are broken out of the receipts accounts.

Chart No. 3 Canada's National Accounts

1954, 1955, 1st Half 1956—in Billions

	Receipts	1956 1st Half	1955	1954
I	Wages, Salaries and Supplements	14.2	12.8	11.9
II	Military Pay and Allowances	.4	.4	.4
III	Investment Income	5.0	4.4	3.7
IV	Net Income of Unincorporated Business	3.5	3.2	2.7
V	Indirect Taxes	3.5	3.2	2.9
VI	Depreciation Allowances	3.1	2.9	2.5
VII	Residual Error	-.2	-	-.1
	Gross National Product	29.5	26.8	24.0

	Expenditures	1956 1st Half	1955	1954
I	Personal Expenditures on Consumer Goods and Services	18.1	16.9	15.6
II	Government Expenditures on Goods and Services	5.1	4.7	4.4
III	Gross Domestic Investments			
	Construction (Residential and Non-Residential)	4.0	3.3	2.8
	New Machinery and Equipment	2.6	2.0	1.7
	Change in Inventories	+.7	+.5	-.2
IV	Net Foreign Balance on Account of Goods and Services	-1.2	-.7	-.4
V	Residual Error	+.2	-	+.1
	Gross National Expenditures	29.5	26.8	24.0

Now how do we go about forecasting, say, year-to-year changes in G.N.P.? Basically, there are two methods, the first of these is simply a blow-up of intended investment expenditures by the government and by private enterprise. These intentions are determined twice a year by a government survey and are published in January and July. Since there exists a fairly stable relationship between these outlays and Gross National Product (or Gross National Expenditure) a quick estimate can be derived from the result of these surveys.

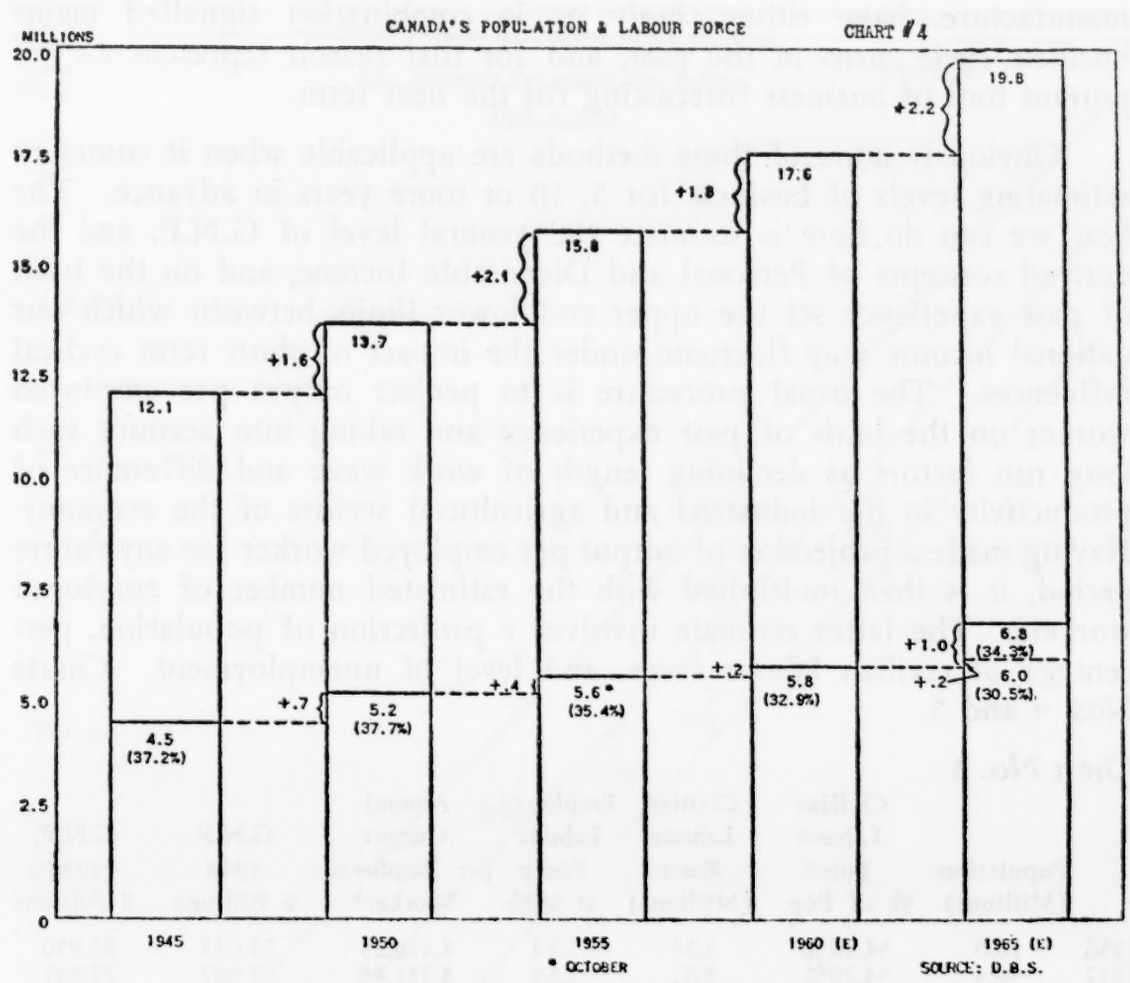
The second method essentially consists of building up the estimates of G.N.P. from a detailed analysis and forecast of each of the accounts on the expenditure side of the national income statement. The greatest difficulty here consists in getting a good estimate of consumer expenditures which constitute the great bulk of the total. Surveys of consumer buying intentions on the scale of those carried out by the Federal Reserve Board's S.R.C. in Ann Arbor are not available in this country so that the analyst is forced to rely on inferences from such series as the savings ratio, consumer credit outstanding and terms of credit, department store sales, levels of retail business, etc.

Forecasts of government expenditures, both federal and provincial, can be derived pretty well from the budgets which become available after April 1st of each year. Prior to that, public statements by the Prime Minister and the Minister of Finance, together with the obvious requirements of the current economic situation, frequently furnish a clue as to the probable level of taxation and expenditure that must be expected in the near future. In any event, a major portion of government expenditures is fixed by statute or through long-term contractual obligations so that the total cannot change too violently from year to year.

An estimate of busines spending on new construction and machinery and on repair expenditures can be obtained from the semi-annual surveys referred to above. More difficult is the estimate of investment or disinvestment in inventories which tend to rise and fall with current and expected sales and with the general price level.

Somewhat hazardous also is the forecast of the level of Canada's exports which play a considerable role in determining business conditions in this country. Properly done, it requires a forecast of economic conditions of Canada's main trading partners, notably the United States and Great Britain. Abrupt policy changes involving the imposition of foreign exchange restrictions or quotas, or changes in commercial policy, can materially effect foreign trade levels, and sometimes make shortshrift of the most cleverly contrived forecasts.

In this detailed fashion, then, the expenditure side of the national accounts is estimated.



To round out this discussion on short term forecasting methods, we might mention also the so-called 'econometric approach' as a third alternative. This approach represents the national economy by a system of simultaneous equations and it seeks to solve for the unknown, say next year's G.N.P., by substituting the current values of assumed determiants of G.N.P. together with their historically derived constants in the various equations. This most interesting attempt suffers from the defect that it presupposes stability or at least systematic change of its constants, a condition which is not always fulfilled. Viewing, as it does, the economy more as a machine than as a living organism, it furthermore tends to disregard psychological factors such as business confidence. These, and similar reasons explain why this approach to national income forecasting must still be considered in the experimental stage.

Of supplementary importance in assaying the levels of business immediately ahead are the so-called business barometers which can be classified into leading, coincident, and lagging types. Of the leading kind, series of weekly hours worked in industry, building permits, prices of certain commodities, business incorporations and failures, industrial security prices, money in circulation, inventories and new orders in

manufacture, have either singly or in combination signalled major business cycle turns in the past, and for that reason represent an important tool of business forecasting for the near term.

Obviously none of these methods are applicable when it comes to estimating levels of business for 5, 10 or more years in advance. The best we can do here is estimate the general level of G.N.P. and the derived concepts of Personal and Disposable Income, and on the basis of past experience set the upper and lower limits between which our national income may fluctuate under the impact of short term cyclical influences. The usual procedure is to project output per employed worker on the basis of past experience and taking into account such long run factors as declining length of work week and difference of productivity in the industrial and agricultural sectors of the economy. Having made a projection of output per employed worker for any future period, it is then multiplied with the estimated number of employed workers. The latter estimate involves a projection of population, percentage of civilian labour force, and level of unemployment. Charts Nos. 4 and 5.

Chart No. 5

	Population (Millions)	Civilian Labour Force % of Pop.	Civilian Labour Force (Millions)	Employed Labour Force at 96%	Annual Output per Employed Worker*	G.N.P. 1949 $ Billions	G.N.P. 1954 $ Billions
1956	16.0	34.76%	5.56	5.34	4,128.25	22.045	26.950
1957	16.4	34.29%	5.62	5.39	4,231.46	22.807	27.881
1958	16.8	33.82%	5.68	5.45	4,337.24	23.638	28.897
1959	17.2	33.35%	5.74	5.51	4,445.67	24.496	29.946
1960	17.6	32.88%	5.79	5.56	4,556.81	25.336	30.973
1961	18.0	32.88%	5.92	5.68	4,670.73	26.530	32.433
1962	18.4	32.88%	6.05	5.80	4,787.50	27.767	33.945
1963	18.9	33.35%	6.30	6.05	4,907.19	29.688	36.293
1964	19.3	33.82%	6.53	6.27	5,029.87	31.537	38.554
1965	19.8	34.29%	6.79	6.52	5,155.61	33.614	41.093

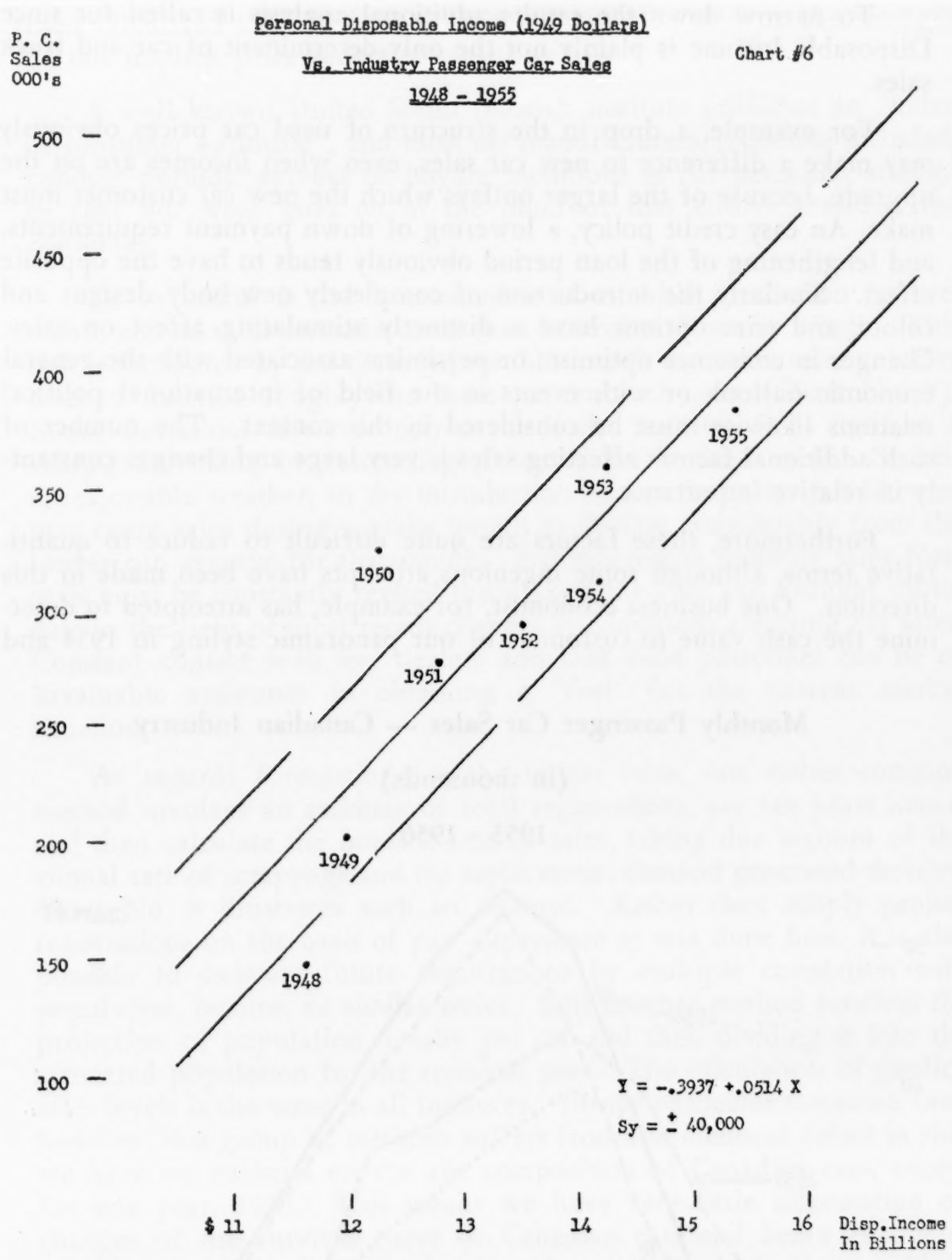
*1949 Dollars

ASSUMPTIONS:

1956 population equal to 19.8 million, civilian labour force declines to 32.88% of population and then increases again with advent of postwar generation on labour market; 4% average annual unemployment; output per employed worker increases annually by 2.5% compounded.

Having, by these and similar means, arrived at some idea of what the near or long term business outlook may be, the analyst must convert it into sales figures. This conversion itself is no mean feat and a great deal of ingenuity is constantly being spent in an attempt to accomplish it.

Perhaps the most usual point of departure in a year-to-year forecast is the determination of passenger car sales, from correlation with, say, forecasted Disposable Income. The accompanying Chart No. 6 shows the so-called line of regression which represents the line of average relationship between Disposable Income and car sales during post-



war years. By substituting any forecasted value of Disposable Income on the X-axis we can read off the corresponding value of sales on the Y-axis, provided the same sort of conditions that prevailed during the 1948-55 period continue to hold true. The result is accurate however only within a fairly substantial margin of error indicated by the parallel dash lines, and referred to by statisticians as the standard error of estimate.

To narrow down the results additional analysis is called for since Disposable Income is plainly not the only determinant of car and truck sales.

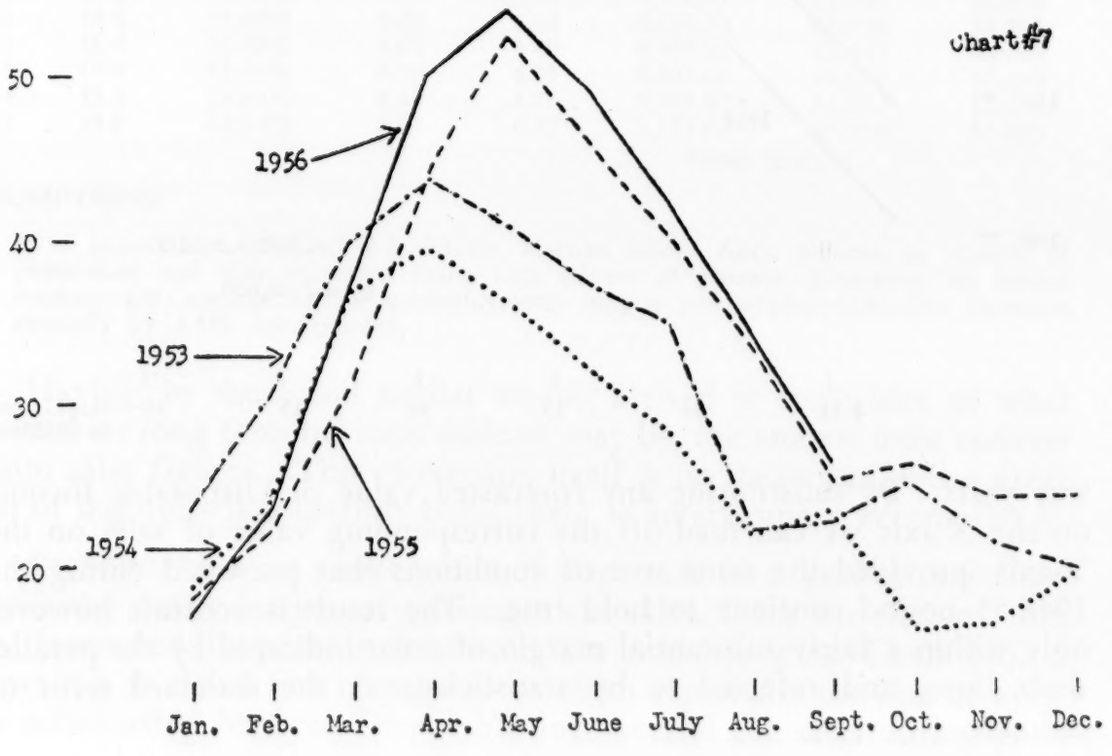
For example, a drop in the structure of used car prices obviously may make a difference to new car sales, even when incomes are on the upgrade, because of the larger outlays which the new car customer must make. An easy credit policy, a lowering of down payment requirements, and lengthening of the loan period obviously tends to have the opposite effect. Similarly the introduction of completely new body designs and colour and trim options have a distinctly stimulating affect on sales. Changes in consumer optimism or pessimism associated with the general economic outlook or with events in the field of international political relations likewise must be considered in this context. The number of such additional factors affecting sales is very large and changes constantly in relative importance.

Furthermore, these factors are quite difficult to reduce to quantitative terms, although some ingenious attempts have been made in this direction. One business economist, for example, has attempted to determine the cash value to customers of our panoramic styling in 1954 and

Monthly Passenger Car Sales — Canadian Industry

(in thousands)

1953 - 1956



then calculated the additional cars that would be sold on the strength of this implicit price reduction.

A well known United States research institute publishes an "index of consumer optimism", and most car manufacturers, ourselves included, conduct periodic surveys of buying intentions in the perennial attempt to find out what goes on in the mind of that elusive creature, the consumer.

To be useful in the determination of monthly production requirements, annual sales estimates must then be broken down by month. This task is facilitated by the circumstance that month to month sales volumes tend to describe roughly the same pattern each year (Chart No. 7). Major deviations however may occur if the industry finds itself in a sharply ascending or descending phase of the business cycle. Strikes, unseasonable weather, or the introduction of new body designs likewise may cause sales during a given month to deviate considerably from the longer run average for that month. For this reason monthly sales forecasts must be constantly revised throughout the year and brought up-to-date in the light of most recent changes in conditions affecting car sales. Constant contact with key dealers and GM field personnel can be of invaluable assistance in obtaining a "feel" for the current market situation.

As regards forecasting for the longer term, one rather common method involves an estimate of total registrations, say ten years hence, and then calculate the implicit rate of sales, taking due account of the annual rate of scrappage and the replacement demand generated thereby; Chart No. 8 illustrates such an attempt. Rather than simply project registrations on the basis of past experience as was done here, it is also possible to estimate future registrations by multiple correlation with population, income, or similar series. Still another method involves the projection of population density per car and then dividing it into the estimated population for the terminal year. The calculation of implicit sales levels is the same in all instances. In our particular Canadian case, however, this group of methods suffers from the identical defect in that we have no statistics on the age composition of Canadian cars, except for one year, 1953. This means we have very little information on changes of the survival curve of Canadian cars and hence encounter considerable difficulty in estimating the rate at which cars are likely to be scrapped.

The entire problem of estimating scrappage can be avoided by forecasting sales directly. Chart No. 9 shows the result of such an attempt.

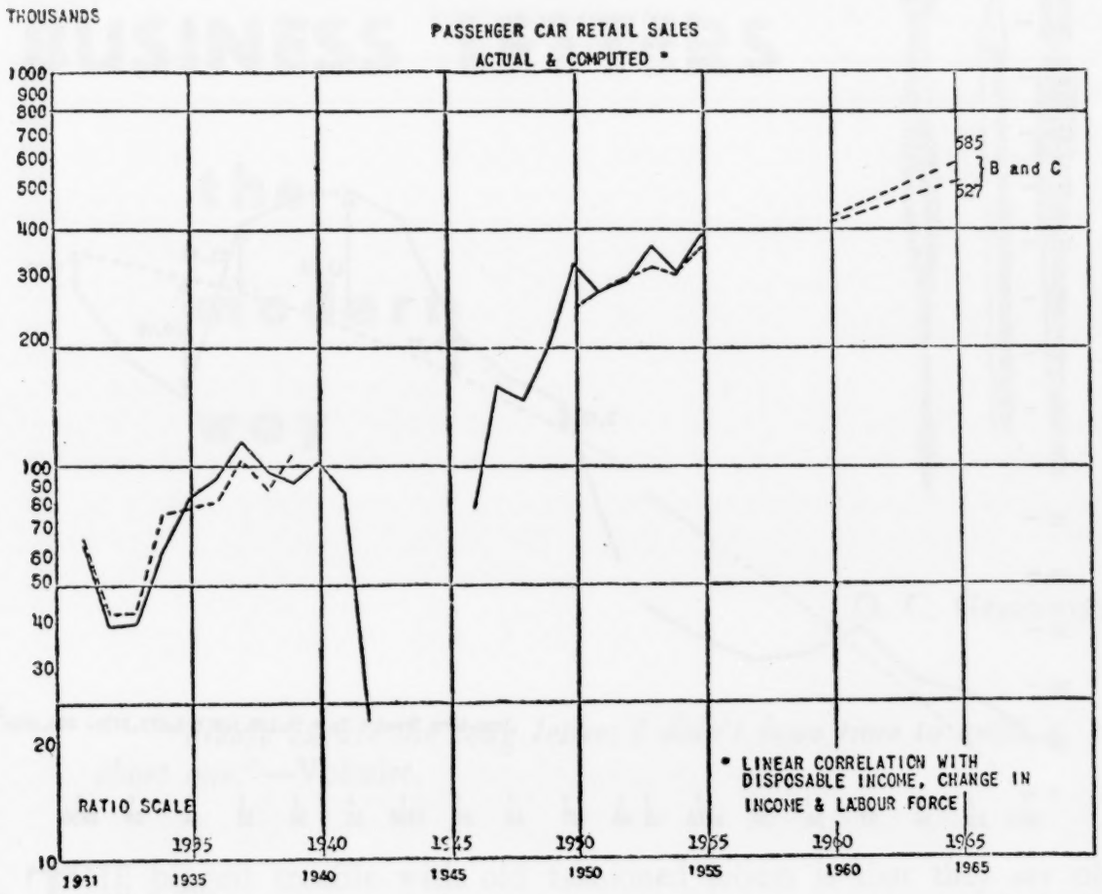
In this particular case future industry sales were derived from forecasted values of Disposable Income, change in income and size of labour force taken in combination. The last mentioned factors were chosen

Chart No. 8

		Regis-trations (000,000)	Net Increase %	Net Increase Nbrs. (000's)	ALTERNATIVE I Average Life Expt. (Yrs.)	ALTERNATIVE I Scrappage % of Regist.	ALTERNATIVE I Scrappage Nbr. of Units (000's)	ALTERNATIVE I Total New Car Demand (000's)	ALTERNATIVE II Average Life Expt. (Yrs.)	ALTERNATIVE II Scrappage % of Regist.	ALTERNATIVE II Scrappage Nbr. of Units (000's)	ALTERNATIVE II Total New Car Demand (000's)
Average Annual Increase (1933-41): 4.23%												
Actual	1948	1.496										
	1949	1.672	11.7	176		2.6						
	1950	1.910	14.23	238		5.6						
	1951	2.095	9.68 *	185		4.4						
	1952	2.296	9.59	201		3.5						
	1953	2.513	9.45	217		6.2						
	1954	2.682	6.73	169		5.1						
Estimate	1955	2.903	8.23	221	17.5	5.7	165	386	17.5	5.7	165	386
	1956	3.084	6.23	181	17.0	5.9	182	363	17.0	5.9	182	363
	1957	3.214	4.23	130	16.5	6.1	196	326	16.5	6.1	196	326
	1958	3.350	4.23	136	16.0	6.2	208	344	16.0	6.2	208	344
	1959	3.492	4.23	142	15.5	6.4	224	366	15.5	6.4	224	366
	1960	3.639	4.23	147	15.0	6.7	244	391	15.0	6.7	244	391
	1961	3.793	4.23	154	14.5	6.9	262	416	14.5	6.9	262	416
	1962	3.954	4.23	161	14.0	7.1	281	442	14.0	7.1	281	442
	1963	4.121	4.23	167	14.0	7.1	293	460	13.5	7.4	305	472
	1964	4.295	4.23	174	14.0	7.1	305	479	13.0	7.7	331	505
	1965	4.477	4.23	182	14.0	7.1	318	500	12.5	8.0	358	540

*Av. = 10.23%

CHART #9

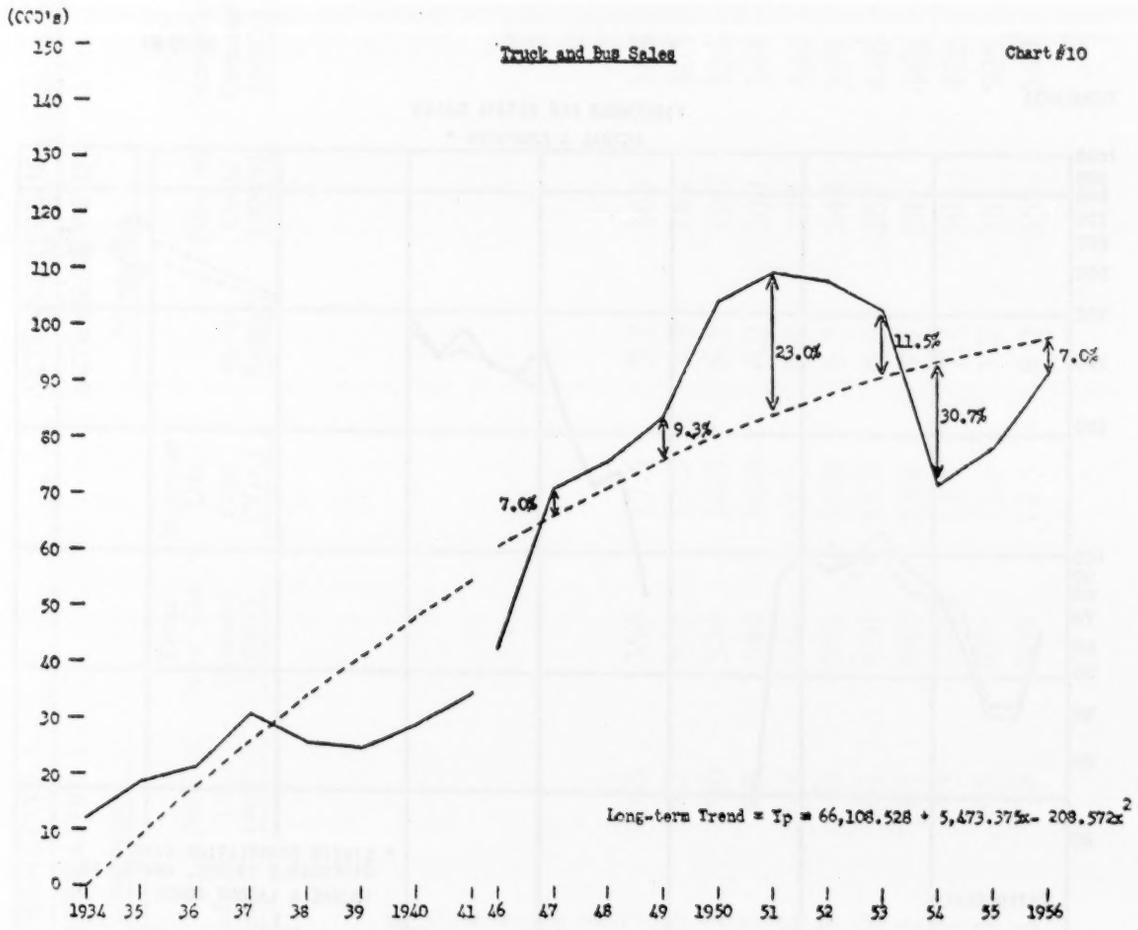


after a test had shown that these three variables had accounted for a major part of sales variation in the past ("computed" versus "actual"), and on the assumption that they would continue to do so in the future.

The validity of this whole approach furthermore depends of course on the accuracy of the forecasted independent variables, in this case Disposable Income, change in income and size of labour force.

Inasmuch as the forecasted volume of sales must be considered more as an average than as a specific prediction for a particular year, an attempt must be made to establish the probable annual range of deviation from the long term sales average. Chart No. 10 shows the extent to which annual truck and bus sales have varied from the long term average here represented by a parabolic trend line. On the basis of such or similar analysis possible future sales maxima and minima may be established, for the purposes of e.g. determining required additions to productive capacity.

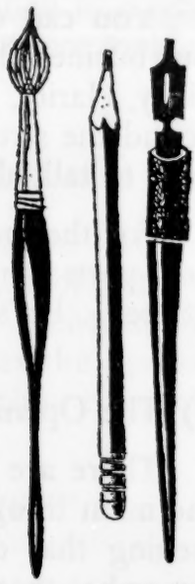
The foregoing has been an attempt briefly to show the various methods currently used in business and sales forecasting in the automotive field.



While the apparatus is impressive, it is by no means unfailing and as the discussion has pointed up, experience and intuitive judgment, plus a bit of luck must still be considered the successful forecasters' most important stock-in-trade.

BUSINESS LETTERS

the modern way



D. C. Greenwood

"Please excuse the long letter; I didn't have time to write a short one."—Voltaire.

THE biggest trouble with old fashioned letters is that they *are* old-fashioned. Acceptable in their time, they carry the flavour of the Victorian age, complete with gas lamps, high-button shoes, and the musty smell of brownstone offices overlooking the square. They were written in phrases of overstuffed courtesy and polite evasions; a letter was never a letter but an "esteemed favour"; a man was not told something but was "kindly advised"; a writer never simply stopped but "begged to remain".

At the end of this article is a list of some of the antiquated expressions with their modern equivalents. They are included as things to avoid if you want to make your letters sound crisp and modern.

Modern business style is much brisker and more concise than it used to be. On an absolute scale it is probably a better style. It has the virtues of simplicity, clean line, and a functional approach, in much the same way that modern furniture has these virtues. Like modern furniture, too, it may run the risk of too much simplification; but on the whole it is better adapted to the temper of our times. Short sentences, short paragraphs, simple words, and direct expressions—all these are trademarks of the modern style.

You can easily find long lists of desirable qualities to include in your business letters—conciseness, accuracy, completeness, courtesy, simplicity, clarity, interest, and so on. But let's organize our approach here around the structure of the letter. It's a little more tangible and a little easier to talk about.

For the most part, it's useful to consider a business letter as having three parts: an opening, a closing, and a body—the part that comes in between. Let's take them up one by one.

(a) The Opening

There are many good ways to open a letter—and many bad ones. The main things is to avoid a stilted, "automatic" opening—the sort of opening that doesn't say a thing or is worn out because of overuse. Remember that the opening spot is one of the strongest positions in the letter. Here is the place to capture the reader's attention, the place to make him want to read on. Here are some (but not all) suggestions on opening:

1. Simply start out.
2. State some action you have taken.
   "This morning we telegraphed you . . ."
   "Unless we have unexpected difficulty, you will receive a full report within two weeks . . ."
3. Use a statement of approval.
   "It is a pleasure to give you the information you asked for in . . ."
   "We agree with you that you have had a great deal of trouble . . ."
   "Thank for the information you sent . . ."

Perhaps more important than what to do is what not to do. The following suggestions on what to avoid may appear arbitrary but experience has shown that, in general, it is wise to observe them:

Avoid:

1. Opening with a participle.
   "Referring to your memorandum of October 5 . . ."
   "Concerning the matter about which you wrote . . ."
2. Opening with a mere acknowledgment.
   "Your letter of October 5 has been received"
   "We acknowledge receipt of . . ."
3. A review of the contents of a previous letter.
   "Your letter of Oct. 5 in which you state that . . ."

Note: Modern practice is to carry this identifying information in a reference line following the salutation. This is true not only in letters but also in interdepartmental memoranda.

3. The Close

The close of the letter represents another strong position. Here is another place where you cannot afford to be ineffective, apologetic, or stiffly formal. This is the worse place to bring out your rubber stamp. The closing sentences should be as original and varied as the opening ones. Don't let yourself fall into the habit of adopting automatic closings.

Here are a few examples of successful closing techniques:

1. A statement of fact
   "Your application will be mailed as soon as we receive your request."
2. A question
   "What is your opinion of this plan?"
3. An expression of good will
   "We want to be of continued assistance to you."
4. A request for action
   Please fill out the enclosed form and return it to us as soon as you can."

Again, as with the opening, there are certain things to avoid.

Avoid:

1. Closing with a participle.
   "Hoping this will be satisfactory . . ."
   "Trusting we may hear from you at your earliest convenience . . ."
2. Closing with an anti-climax.
   "Do you wish to cancel this order? If you do, inform us accordingly and we will be happy to follow your instructions."
3. Closing with a vague statement.
   "Your assistance in procuring additional information will be appreciated."

(c) Body of the Letter: Clarity

There is more than just clarity to consider in a business letter, of course. There are always such things as accuracy, completeness, interest,

conciseness—all important and even vital. But accuracy and completeness lie somewhat outside the area of technique; they are things nobody can help you with but yourself. Conciseness will follow normally from applying techniques for readability; and interest, important as it is, may apply with greater force to other kinds of writing than to most business letters. In any case, let's stick to clarity as the number one problem.

Clarity is one of those simple virtues achieved only with great trouble. Part of it comes from having a clear understanding yourself. Nevertheless, there are certain techniques for building it into your letters:

1. *Use simple words, short sentences, short paragraphs.*

   Readability techniques are also techniques for clarity. It is obvious that one way not to be clear is to use words your readers can't understand.

   The famous sentence, "Ontogeny recapitulates phylogeny" is completely unclear to most of us because of the hard-word factor; if you load up your correspondence with words like these you aren't going to become exactly famous for your pure, clear style. (Translation: "As a plant or animal develops from a single cell to its fullgrown state it takes forms similar to those which occurred during the evolution of its species.")

   So don't use difficult words unless you are sure your reader will understand them.

   Long sentences, because they are often (not always!) hard to follow, also work against clarity. So, too, do long paragraphs, and for much the same reason. A good rule is one main idea to a paragraph. If the idea is going to take a long time to develop, put your developing material — reason, examples, illustrations — into individual paragraphs.

2 *Organize your material.*

There are a great many ways to organize written material. The important thing is to have one way and stick to it. The simplest illustration of organization is perhaps a chronological one, starting with a given event and moving forward in time without any backtracking. Reports are often organized logically: they start with a recommendation, followed by reasons for its adoption. Business letters can often be organized around the familiar questions what? why? where? when? how?, roughly in that order.

One device that a number of successful correspondents use is to make a brief outline right on the letter they are answering. They go over the letter, underlining or circling the items they want to reply to or comment on, and then jot down notes to help when they dictate their reply. For example, suppose that a manufacturer of gas ranges has received an order for a single range from an individual. He is compelled to refuse the order because he sells only through retailers. The outline of the reply might be as follows:

a. Thanks
b. Sell only through dealers
c. Returning check; visit or telephone dealer
d. Name, address, phone number of dealer
e. Guarantee
f. Sales talk

In this letter each item might well be covered in a separate paragraph.

Organization applies equally to paragraphs. The simplest organization is that involving the use of a "topic" sentence at the start of the paragraph, followed by other sentences supporting or elaborating the initial sentence. In the following example, the main point—the instruction on what to do—is put in the first sentence. The reasons—the explanation of why—follows:

> "When you return the gas heater, pack it in the box it was in when you bought it, and enclose a $1.00 bill in the box. This $1.00 is all you will have to pay, no matter what is wrong. It covers just the cost of packing the heater and sending it back to you. We pay for the workman's time and for any new parts that have to be put in."

3. *Use "connecting" words.*

"Connective" are words like "and", "but", "so", "however", "besides", "nevertheless", and "still". They are used to carry the thought from one sentence to another.

It is possible to write sentences in which the thought flows smoothly and clearly without any connectives. The paragraph about the heater, quoted above, is an example. In these cases each sentence so clearly bears on the others that no connective is needed. (You may notice that the transition is sometimes accomplished by repeating in the new sentence

one of the key words in the preceding sentence ", , , and enclose a *$1.00 bill* in the box. *This $1.00* is all . . . *It* covers.)

The transition between the last two sentences is more subtle; it is achieved by the logical opposition of what the $1.00 cost is for and what it isn't—what "you" pay and what "we" pay. The contrast of the idea (and the words) "you" and "we" carries the thought along.

This kind of writing is very good, but it is not always possible or even necessary. Connecting words are at times an absolute must. They can be used to show clearly an additional idea ("and", "also", "furthermore"), a contrasting idea or exception ("but", "however"), an overriding idea ("nevertheless", "still"), a time-relationship ("before", "following", "along with"), a casual or purposive relationship ("in order to", "because of", "concerning") and many other relationships. The list might be continued indefinitely.

A lot of people think the careful use of connectives is the big secret in producing clear and coherent writing. Certainly it will help. But, just as certainly, connectives cannot take the place of good organization, no matter how skillfully used.

There is even a danger in the use of connectives. In ordinary writing they form a large proportion of the words used; and, unfortunately, they are "empty" words—they do not add anything to the story. We cannot do without them, but we can at least keep them simple. This is particularly important because it is in these very words and phrases that the tendency to complicate language is at its worst.

Rudolph Flesch gives a list of involved connectives with their simple equivalents. If you want to keep your letters simple and modern, try using his "plain talk" connectives instead of the more formal ones.

PLAIN TALK	BOOKISH
and	likewise
besides, also	in addition
now, next	moreover
then	furthermore
but	nevertheless
however	rather
in other words	that is to say
for example	more specifically
in fact	indeed
of course	to be sure
so	for this reason
and so	accordingly, consequently
therefore	hence, thus

A Note on Style

We started out talking about old-fashioned letters. Let's finish with a note about them.

Good style is more than just being modern. It comes closer to just being honest — writing to express, not to impress. No amount of modern technique will atone for a false attitude or an insincere approach.

The following list will help you avoid the old outworn expressions that creep into our letters in spite of ourselves. It is a useful list. But don't make the mistake of thinking that by itself it will guarantee a good style. Your correspondence style can be no clearer than you are, no more interesting than you are, no better than you.

Stilted or Old-Fashioned Expressions

OLD STYLE	MODERN EQUIVALENT
1. In accordance with your request	1. as requested
2. We desire to acknowledge your letter of the 25th	2. Thank you for your letter of October 25
3. We are in receipt of a complaint from J. W. Carter	3. Mr. J. W. Carter has complained
4. We would, therefore, ask that you kindly investigate	4. Please investigate
5. We would like to be advised	5. Please inform us (or tell us)
6. Under date of	6. on (or dated)
7. We feel that you appreciate	7. You can appreciate
8. We beg to acknowledge receipt of	8. We acknowledge
9. Will you kindly	9. Please
10. We would recommend	10. We recommend
11. Which is in connection with	11. Regarding
12. Letter from the Sales Department dated the 23rd instant	12. Sales Department letter of October 23
13. Attached hereto please find confirmation of telegram sent you on the 24th instant	13. Confirming our telegram of October 24

14. A check in the amount of $00	14. A check for $00
15. We are this day addressing	15. We are writing
16. On August 10th we wrote you requesting	16. On August 10 we requested
17. We wish you would furnish us with	17. Please send us
18. Let us hear from you in regard to	18. Write us about
19. You have not favored us with a response to	19. We have had no reply
20. Your letter under date of November 14th	20. Your letter of November 14
21. We beg to acknowledge	21. We acknowledge
22. Will you please arrange to send	22. Please send
23. We should like to ask whether or not you have received our shipment of May 10th	23. Have you received our shipment of May 10?
24. Upon consulting our records we find that your order reached us January 14th	24. Your order reached us January 14
25. We enclose statement and ask that you kindly send us invoices	25. We enclose our statement. Please send us invoice
26. We hand you herewith statement of our account	26. Enclosed is a statement of our account
27. Enclosed herewith. Attached hereto	27. Enclosed; attached
28. Contents carefully noted	28. (Don't use)
29. Kind Favor Yours Yours favor Your esteemed favor	29. (Don't use for a "letter")
30. The writer	30. We, I
31. Said Shipment	31. The shipment
32. Thanking you, we are	32. Thank you
33. . . . and oblige	33. Thank you

Canada's Present MONEY PROBLEMS

J. N. Wolfe

Most that has been written about the proper role and functions of the Bank of Canada was intended to apply to the depressed nineteen-thirties, and consequently not applicable in the inflatioary post-war world. It is, therefore, unfortunate that so little discussion of basic policy and techniques has appeared since the war. This paper is an attempt to fill a part of this gap. The importance of this subject is shown by the present Congressional and Presidential enquiries into the operating of the Federal Reserve System in U.S.A.

Dr. Wolfe outlines some of the changes in the Canadian capital market, the problems which they present to orthodox measures of control, and the possibility of solving these problems.[1] *Throughout, the problems arising from the pursuit of a monetary policy independent from that in the United States are emphasized. This is to a great extent unrealistic. In many cases the appropriate policy will be the same throughout the world. If no independent policy is pursued there is no problem, and really very little reason for an independent central bank.*

IN the last three decades three great changes have occurred. There is, first of all, the change in the size of the Canadian capital market. Secondly, there is the change in the importance of securities among the assets of the chartered banks. And, finally, there is the change from a period of protracted depression to one of inflation or quasi-inflation.

[1]I am indebted to the Queen's University Summar Seminar in Economics. My debts to the recent writing on monetary policy of Professors J. R. Hicks and H. G. Johnson will be apparent to the reader. I am indebted, too, to Mr. G. F. Bain of Toronto.

The Growth and Change of Canada's Capital Market

The growth in the Canadian capital market is indicated by the change in size and ownership of the national debt. In 1914, the gross national debt was $544 million, of which only $717,000, or less than 1/4 of 1%, was payable in Canada. By 1938, the gross debt had grown to $3,540 million, of which $2,456 million, or 69.3%, was payable in Canada. The war of 1939-45 greatly speeded this process, so that by 1950 the gross debt had risen to $16,750 million, and about 97% of it was payable in Canada.[2]

The concept of the size of a capital market is, it may be noticed, a very ambiguous one. What securities should be considered in appraising its size? At different times securities will be held by different people, so that the activity of the market may vary greatly. Is the capital market capable of supporting the open market policy of the central bank without undue fluctuations in the price of securities? This will depend on the number and attitudes of dealers and the activity of the market quite as much as on its size and on the size of the open market operations thought desirable. What effect will changes in the interest rate have upon the volume of investment, and the level of income? For this problem what is important is not so much the total volume of securities outstanding as the volume of new bond financing, and its relation to the total flow of investment funds. These absolute figures are misleading, too, if we are seeking to discover whether the size of the capital market is adequate for the work it is called upon to do. A study of the size per capita, or per dollar of national income, might be more useful.

Important as these questions are they are less significant in many respects than the degree of perfection of the capital market. All capital markets are, to some extent, compartmentalized or imperfect. Certain sectors of the capital market specialize in particular kinds of work, and the movement of funds between these sectors is not perfectly free. The less the freedom of movement, the less the allocative efficiency of the capital market. We may perhaps distinguish in a rough way between the degree of perfection of two different capital markets, or of the same market at two different times, by determining the flow of capital between two sectors occasioned by a particular change in relative interest rates between them. In that sense the Canadian capital market is now considerably less compartmentalized than it was before the war, but is still more so than that of the United States. This is of considerable importance for, as we shall see later on, a less compartmentalized market may well be one that is more difficult to control in particular ways. It may be found, moreover, that policies which *aim* to increase the allocative efficiency of the capital market may be inconsistent with those

[2]Sources: Canada Year Book, 1938 and 1953.

which aim to control it. In both these ways a conflict between control and allocative efficiency is possible; and much of what follows could be written in those terms.

The Importance of Securities in Bankers' Assets

The ratio of securities held by the banking system to loans in Canada is shown in the table below.[3] It will be seen that the great expansion of loans after the war has restored this ratio to a figure lower than at any time since 1935. The fact is, however, that in 1935 the ratio of securities to loans was already several times as high as the historical pattern would indicate as 'normal'. A continuation of the present trend of growth of loans and security holdings for several years might be required to restore a balance.[4]

Year	Total Securities	Total Loans In Canada	Percentage of Securities to Loans
	(millions of dollars)		%
1867	6.4	55.4	11.6
1900	44.0	303.7	14.5
1914	100.7	947.8	10.6
1920	365.2	1,586.0	23.0
1925	5,755.0	1,067.0	53.9
1930	447.0	1,618.0	27.6
1935	1,031.0	1,015.0	101.5
1936	1,355.0	860.0	157.0
1938	1,436.0	991.0	144.9
1942	1,958.0	1,122.0	174.5
1946	4,297.0	1,326.0	331.6
1950	4,240.0	2,497.0	171.0
1952	4,135.0	3,198.0	129.3
1954	3,060.0	4,067.0	75.2
1955	3,698.0	4,281.0	86.4

The change from deflation to inflation has had one very important result. Whereas monetary policy was concentrated, in the thirties, on

[3]Figures for the years preceding 1942 are taken from A. F. W. Plumptre, Central Banking in the British Dominion, University of Toronto Press, Toronto, 1940, page 241. For later years, the source is "Bank of Canada Statistical Summary", September, 1943-55. Figures are for the end of July in each year.

[4]On this question see Plumptre, Central Banking, pp. 240-245, and also J. D. Gibson: "The Changing Character of Bank Assets", The Canadian Banker, January 1938, pp. 145-155.

the attempt to increase investment, in the post-war period the problem has more often been to restrict it. And as a result in the later period the problems of monetary contraction have had to be given more attention than the problems of expansion. In this paper we will consider monetary policy as a contractionary device alone.

How Banks Can Fight Inflation

Under existing rules the banks are compelled to hold a certain (variable) ratio of cash to their total deposits. A reduction of the cash position of the banking system as a whole will cause the banks to reduce their deposits. This can be done in either of two ways. The banks may reduce the volume of their commercial loans outstanding by calling in some loans and failing to renew others. Or they may reduce their total deposits by selling government bonds to people who are holding their assets in the form of bank deposits. Such sales cause deposits to diminish, and so restore the ratio of cash to deposits in the system. Since the return on most commercial loans is much greater than on government bonds, it will be profitable for the banks to reduce their holdings of government bonds when they come under central bank pressure, as long as their remaining assets are sufficiently liquid to prevent any discomfort. The extremely high volume of securities which the banks now hold makes such conduct very tempting.[5]

The great liquidity of the banks means that the central bank has no effective control over the supply of commercial loans as long as the banking system can sell bonds without loss.[6] Suppose, however, that there is a rise in the rate of interest. An attempt of the banks to safeguard commercial loans, under these circumstances, may place them in the awkward position of having to sell unmatured bonds at an appreciable loss. In those conditions they may well choose to reduce their commercial loans in response to pressure from the central bank. But it will only be as a result of considerable pressure, and after a substantial

5On the question of liquidity see S. N. Sen: Central Banking in Undeveloped Money Markets, Bookland Ltd. (Calcutta, 1952) pp. 92 ff.

6On the basis of British experience in 1914, Professor Sayers has concluded that the volume of advances will not in any circumstances be affected by a change in interest rates. In the unlikely event that he is correct the suggestions put forward in this paper are of even greater importance. Cf. R. S. Sayers: Modern Banking (2nd Edition), Oxford, 1949, p. 236.

rise in interest rates, that central bank control of the volume of commercial loans will become effective.[7] [8]This might not, at first sight, seem a very great limitation, since the central bank does undoubtedly have the power to manipulate the interest rate. There is, however, some reason to believe that central bankers in a country like Canada do not feel free to undertake such action independently from central bankers in other countries. If that is so they may find themselves unable to adopt an independent policy towards the volumes of commercial loans. We must examine, then, the reasons which may persuade central bankers of the unwisdom of an independent interest rate policy.

Canada Must Keep In Step Unless . . .

The reasons why the Bank of Canada should wish to protect and further develop the Canadian capital market are not far to seek. There is, first and foremost, the question of allocative efficiency. If, secondly, a large part of Canadian bonded debt is held by foreigners, and payable in foreign funds, while Canadians hold foreign securities, a sudden financial crisis in a foreign country may put great strain upon the balance of payments. Receipts of interest may fall off quite suddenly but payments by Canada are likely to continue. If the exchange rate is not supported there will be no drain upon reserves, but the exchange may move in a manner unsatisfactory from the point of view of internal policy. Even more important, disappearance of the domestic capital market would entail the complete loss by the Bank of Canada of control over interest rates, since these would be determined by demand and supply in the foreign capital market.

It is usually argued that lenders are sensitive to the relative *stability* of bond prices in related markets, so that any tendency for Canadian bond prices to fluctuate more than those of corresponding American

[7]It is, of course, obvious that if a rise in the rate of interest is allowed, it will make the sale of new bonds and mortgages both less easy and less attractive. The volume of funds flowing through that sector of the capital market would then be somewhat reduced. A sympathetic movement of the stock exchange may, ceteries paribus, cause a similar contraction in the new capital supplied by that market. It would, however, be unwise to believe that a moderately higher interest rate would by itself reduce by much the volume of physical investment in Canada, if only because of the relative smallness of the magnitudes involved. It may be, however, that the effect of a moderate rise in the rate of interest on investment activity is sometimes magnified because of the depressing effect such a movement has upon business expectations. But in a country as dependent upon foreign markets as Canada, the influence of the central bank's independent actions in altering the rate of interest upon business *expectations* is likely to be severely limited. Thus the central bank, in Canada, must look elsewhere for its principal weapon of control.

[8]A fall in bond prices will, on this orthodox account, only restrict the volume of advances temporarily. If it were to be effective over a longer period, central bank pressure would have to include open market operations sufficient to prevent the diversion of funds from maturing securities. The effect of a rise in interest rates is more subtle and more lasting. Some shift away from advances to marginal customers should occur as a result of the changed relative attractiveness of bonds and advances, taking into account the short-run character of advances, the inflexibility of advance rates, and the possibility of capital gains from holding securities.

issues will reduce their relative attractiveness. It follows that a country wishing to develop its capital market must be concerned lest its interest rates fluctuate too often or too greatly. Much of the literature of central banking in underdeveloped capital markets starts from this premise.[9] It is not so often recognized, however, that the development of a capital market is also dependent upon the relative *level* of interest rates in it. The willingness of Canadian borrowers to borrow in Canada will be assumed here to be, *ceteris paribus,* a function of the relative level of interest rates in this country and in the United States. The willingness of Canadian lenders to buy or hold Canadian securities is also assumed to be a function of the relative rates of interest in these two countries. If, under these assumptions, the Bank of Canada wishes to assure the continuance of the tendency of Canadian lenders and borrowers to deal in Canadian securities, there will be quite narrow limits within which it can operate. It must not allow the rate of interest to go very much above or much below that in the United States, and it must prevent the rate of interest from fluctuating more in Canada than in the United States. That implies that except for small and temporary divergences, interest rate policy in this country must parallel that in the United States.[10] And if, as we have suggested, normal measures of control by the Bank of Canada over the chartered banks' commercial lending operations are only possible after a rise in the rate of interest, then, the Bank of Canada can only restrict bank lending when there is a rise in interest rates in the United States.

There is no definite and unchanging relationship between American and Canadian interest rates. The true relationship may usefully be regarded as analogous to an equilibrium tendency. The actual rate may be above or below the 'equilibrium' rate for fairly short periods (perhaps as much as several months) without very much perceptible effect. Moreover this 'equilibrium' rate may change from time to time, particularly if the exchange value of the Canadian dollar is free to vary, or is expected to change by certain sensitive bondholders. More important, however, is the fact that the true equilibrium rate is a very long run phenomenon only made effective in the short run by the action of the Bank of Canada. If there is any change in the Bank's sensitivity to foreign lending or borrowing by Canadians the short-run 'equilibrium' rate will change.

[9]In considering the advantages of flexible interest rates it must be remembered that some parts of the Canadian capital market may be so narrow that intervention in them might involve violent movements of unpredictable magnitude. Any further narrowing of these sectors might conceivably make their control more difficult. Whether these paricular sectors oughts to be specially sheltered must depend on the central bank's estimate of the relative seriousness of the problems facing it. But if the protection of such sectors involves the emasculation of the central bank's activities in other sectors their very existence may be a net disadvantage to the community. Whether or not the new day-to-day market falls within this category, as I suspect it may do, only time can tell.

[10]Assuming that exchange rates, while not necessarily fixed, do not respond in any marked degree to changes in interest rate policy; some implications of the relaxation of this assumption are examined later.

For all these reasons I am not inclined to regard the divergent movements of Canadian and American interest rates for several months in the past two or three years as casting much doubt upon our hypothesis as to the limitations upon Bank of Canada policy. It seems to me much too early to regard these divergences as the beginning of a period of Canadian monetary independence. My belief that an independent Canadian interest rate policy is unlikely to produce by its direct internal effects any important influence unless it is very forceful indeed increases my skepticism on this score, and particularly with respect to recent 'easy-money' policies.

Unorthodox Measures Could Bring Independence

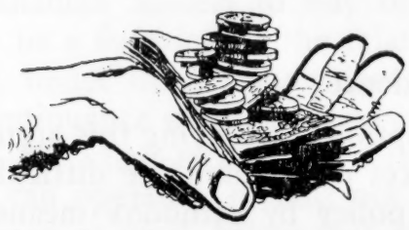
If we accept, for the moment, the assumptions underlying this argument, it appears that the Bank of Canada faces insurmountable difficulties in pursuing an independent monetary policy by orthodox means. Some different measures of control are apparently necessary. We may group the possible measures into three main categories. There is, first of all, an attempt to restore the former separation between the bank and non-bank sectors of the capital market which increased bank liquidity has undermined. This would enable the Bank of Canada to vary the volume of commercial loans without affecting the interest rate appreciably. Secondly, there is the possibility of insulating the Canadian capital market from the American. This would enable the Bank of Canada to move Canadian interest rates independently without danger to the Canadian capital market. There is thirdly the possibility of using monetary techniques which do not appreciably affect the Canadian interest rate. We will consider these solutions in turn.

There are several ways in which the banking sector can be separated from the rest of the capital market.[11] The most straightforward way of doing this is by making an agreement with the banks that they will contract their advances by a certain percentage at some specific time, either with or without concomitant reduction in the volume of cash. This solution is, I think, deceptively simple. Even if the banks cooperate in the most whole-hearted manner there is likely to be a considerable lag between the time the central bank sees the danger and the time the agreement is completed and put in force. The importance of speed and flexibility in monetary control cannot easily be overstated. I should like to suggest, moreover, that the use of moral suasions ought properly to be limited to the control of special situations of limited importance which emerge only infrequently. They represent, otherwise, an extra legal extension of the Bank of Canada's powers not fully consistent with the rule of law.

[11]We have assumed for simplicity that this independent monetary policy is pursued with a background of stable interest rates in foreign markets. It would be an easy matter to extend the analysis to treat more complex cases.

Will Banks Be Moral

Let us examine a little more closely the difficulties inherent in the use of moral suasion. First of all, it is a process which is not uniformly successful. If it succeeds at all, it is not so much because of the loyalty of the commercial banks as because of the moderation of the central bank in calling for sacrifices from them. If the central bank asks too much or too often, it will eventually be refused. And if the refusal comes at a time of crisis, it may be very difficult to force the hand of the banks by legislation in time, or to prevent the unfavourable effects on confidence of a split in policy between the commercial and central banks. It would be preferable, from this point of view, to arm the central bank with sufficient power before a problem arises.



From the point of view of the commercial banks the situation is almost equally clear. A commercial bank is a money-making institution, not a public service organization. Its directors, like those of any other company, are supposed to pursue the interests of the shareholders within the restraints imposed by law. Moral suasion consists of persuading the directors of a commercial bank to restrict their pursuit of profit in order to be of assistance to the central bank. It means, therefore, that the directors must be able to convince their shareholders that each particular compliance with the wishes of the central bank was in fact justified. No doubt directors can so convince the shareholders. But as the number and importance of the occasions on which moral suasion is employed grows, the unpleasantness of the position of the bank directors must increase. There is, therefore, some reason to believe that the directors of most commercial banks would eventually come to see the value of the introduction of more formal legal methods of control to replace the currently fashionable extra-legal forms.[12]

Compulsory Reserves?

Another way in which the bank and non-bank sectors of the economy could be separated is by a great reduction of bank liquidity. Open market operations sufficient to achieve this result over the long run are clearly impossible without the complete disruption of the capital market. There remain, however, various system of compulsory control. Banks may be *compelled* to keep certain secondary reserves in government bonds;

[12]The "crisis" of 1950-51 is perhaps the best illustration of the shortcomings of moral suasion, and of the need for separate control of bank deposits and advances. Cf. J. D. Gibson: "Post-War Economic Development and Policy in Canada", Canadian Journal of Economics and Political science, 20(4):439-55, Nov. 1954.

or they may be compelled to hold a certain volume of non-negotiable instruments (Treasury Deposit Receipts). Again, the chartered banks may be compelled to increase their deposits at the Central Bank, the extra cash being provided by purchase of government bonds by the Central Bank. Any one of these arrangements would be very attractive in the Canadian case but it seems to me that the possibility of abuse by the Department of Finance is very great. Such schemes seem, too, to be a unnecessary restriction of the chartered bank's elementary right to safeguard its depositors by avoiding whatever assets appear to it least satisfactory.

It seems to me, moreover, that there is a more satisfactory way for the Bank of Canada to secure control over the volume of advances. The most simple way to introduce the plan will be to reconsider the essential nature of the operations of a central bank. Looked at in the most abstract way, what the central bank does is to manipulate a stock of assets under its control (cash) in such a way as to cause the chartered banks to manipulate another stock under their control (deposits) in some desired fashion. From this abstract point of view there is no real difference between the central bank's manipulation of the volume of cash in the system and its manipulation of the desired ratio between cash and the chartered banks' stock of deposits. Nor is there in general any reason why some particular stock should be selected either for the central bank or for the chartered banks. The actual stocks chosen for manipulation and the ratios selected are accidents of banking development. A central bank may quite properly select different stocks and ratios for manipulation or alter its choice of assets and ratios at will, while retaining its essential functions. The only limitation must be that one of the stocks is completely under its own control. Upon the stocks it chooses to control and the manner in which this control is exercised will depend the effect of central bank action. Techniques of control should rationally be chosen for their effectiveness in achieving the specific goals required by the central bank.

New Powers for the Bank of Canada

It seems to me that the Bank of Canada ought to have certain new powers. The Bank should be empowered to set maximum ratios between chartered banks cash and commercial loans, and to vary this ratio at will. This means that the Bank of Canada could limit to any extent desired the commercial loans of the chartered banks without directly causing any sale of bonds by these banks and therefore without altering directly the rate of interest. This proposal is open to the objection that, since ratios of cash to commercial loans vary from bank to bank, no single ratio would be satisfactory to every bank. Some might be forced to contract their loans while others were expanding theirs. The simplest way to meet this difficulty is to establish a distinct ratio of cash to loans for

each bank, rather in the way that government deposits are divided among the chartered banks. Perhaps it would be necessary to set up a quasi-judicial commission to which those banks could appeal who wished to increase their ratios. In periods of economic stability the maximum ratio of cash to commercial loans should, of course, be kept at a nominal figure. Thus the Bank of Canada would have ready to hand a tool, whose possible distorting effects would be minimized when it was not really needed.[13]

If the Bank of Canada were at the same time to retain its powers to fix and alter the ratio of cash to total deposits, it could, through the medium of open market operations, continue to manipulate the total supply of assets held by the banking system. There would then be a fairly complete control of both commercial loans and bond-holding which should prove sufficiently flexible to meet most forseeable circumstances.[14]

It must not be pretended that an attempt to separate bank from non-bank sectors of the capital market can be free from drawbacks and loopholes. A stringency in the supply of bank loans will result in a search for other sources of funds. New borrowers will appear in the bond and stock markets, and the rate of interest and the yield on common stocks will, ceteris paribus, tend to rise. This rise may not be very great, however, if, as seems likely, these sources of funds do not provide a perfect substitute for bank credit in the minds of borrowers. The central bank may, of course, prevent even the limited rise in interest rates that would otherwise be bound to appear by causing the banks to buy bonds, either by changing the cash to deposit ratio, or by open market operations.[15] In so far as such a policy is successful, however, the restrictrive

[13]It has been pointed out to me that an individual bank which found itself pressed to reduce its loans by a change in the allowed cash to loans ratio would attempt first of all to improve its cash position by selling bonds. It would not, however, be possible for all the chartered banks to increase their cash position at once: the attempt of the banking system to obtain cash would only result in a reduction of deposists. There might, then, be an initial rise in the rate of interest, but once the banks came to realize what was afoot it would fall again to its old level. The disturbance would not be very great in any case, and it would be much diminished if the Bank of Canada were to inform the chartered banks of its intentions before taking action.

[14]Similar suggestions made in the past have usually suggested a control of the ratio of chartered bank capital and surplus to advances, as an aid to insuring bank solvency rather than central bank control. See the 20th Annual Report of the Federal Reserve Board (1933), p. 44. Cf. also Sen, op. cit. pp. 162-166.

[15]The success of the policy sketched above depends on a substantial degree of compartmentalization of the capital market. If financial institutions other than banks are willing to provide bank-like services, or if both and potential borrowers are prepared to deal in bonds rather than advances, the policy will be less successful. The sale of government bonds by such non-bank lenders will cause the rate of interest to rise unless the banks purchase them, and so indirectly provide further sources of credit. The importance of such leakages is probably limited in the short run in an imperfect capital market. A narrow, compartmentalized market is, in the short-run at any rate, an easy market to control. It can be argued, I think, that the Bank of Canada has not realized its advantages in this respect, and has been immobilized by its desire to create a type of market which can be handled by the classical methods of central bank control.

effects of the central bank's original measures will be diluted.[16]

From a somewhat wider point of view, frequent restriction of bank credit without an accompanying change in the rate of interest on bonds tends to give bond financing an unnatural long-run relative advantage. In an economy subject to fluctuations from international trade, this may become a considerable burden. The fact that only large companies can effectively resort to the bond and stock markets means, too, that restriction of bank credit is apt to fall more and more on the smaller firms, and thus to add to the competitive disadvantage of such firms. Finally, the restriction of control to the banking sector of the capital market may have as a result an undesirably large fluctuation in the volume of inventories held by firms, with consequent disruptions in the smooth flow of production.

Insulating the Canadian from the America Capital Market

Let us consider now the possibility of separating the Canadian and American capital markets. The Bank of Canada might be given the power to impose a tax on the sale of certain new securities in the United States. It might also be given the power to impose a tax upon income received from securities held in the United States by Canadians, or upon the principal of American securities purchased by Canadians after some specific date. By using these powers the Bank of Canada would be able to regulate the movement of Canadian lenders and borrowers out of the Canadian capital market without the use of direct controls. Once the fear of deterioration of the Canadian bond market was removed, the Bank of Canada would feel much more free to pursue an independent policy with respect to interest rates. And the flexibility of interest rates would imply the return of central bank control over the volume of commercial loans, as well as over the volume of deposits.

As simple and attractive as the above proposal appears, it has one serious drawback. It would still leave the Bank of Canada without powers to meet a situation in which there was need for opposing movements in the volume of bank-held government bonds and commercial loans, a situation which might arise if a domestic inflation were accompanied by large inflows of capital from abroad, while, for one reason or another, the exchange rates was not allowed to move freely. This control could only be assured by an adoption of the above proposals, either by themselves or in conjunction with the present suggestion.

[16]If there were an extensive movement of borrowers into the American capital market as a result of the restriction of bank lending, the exchange rate would rise. This movement of the exchange rate would decrease inflationary pressure in Canada directly. We must, on the other hand, consider the effect of foreign borrowing in hampering the Canadian credit restriction. I do not believe, however, that a sufficient proportion of Canadian industrial borrowers would have easy access to the American bond market or to American banks to make this sort of development important in practice.

Manipulating the Foreign Exchange Rates

The final possibility for a successful independent monetary policy under the limitations of our assumptions is that the Bank of Canada pursue its objectives by directly manipulating the exchange rate rather than the rate of interest. This implies that the Bank of Canada maintain flexible exchange rates, and allow its reserves of foreign currency to vary from time to time in such a way as to achieve its internal objectives. For example, an inflationary situation might be met by selling American dollars so as to appreciate the Canadian dollar. This would lower the income and also the output of Canadian exporters whose price is determined mainly in foreign markets. It would decrease Canadian exports of manufactured goods, increase import competition, and lower the price of products using foreign components. In all these ways it would prove deflationary, and this deflationary pressure might after a time reduce the adverse effects on the current balance, thus making it conceivable that the high exchange rate could be continued without further loss of reserves. If the presence of determined governmental intervention in the foreign exchange market is sufficient to raise considerable doubts about future movements of the exchange rate, there need be no speculative drain on reserves, and no market effect on the rate of interest in Canada.[17]

If, however, the conception of a "normal" value of the Canadian dollar were particularly influential, or if the required divergence of the exchange from this "normal" value were very great, speculation against the dollar would become important. Reserves would be depleted, and the rate of interest would tend to rise relatively to that in the United States. A rise of interest rates in Canada which is offset by an expectation of a decline in the exchange need not necessarily be dangerous, however. The aim of Canadian policy under our assumptions is not to ensure a fixed relation between Canadian and American interest rates, but rather to pursue such a policy as a means of protecting the Canadian capital market. When there is a widespread expectation that the Canadian exchange will depreciate, a relatively high interest rate in Canada may be *necessary* to protect the capital market. The "appropriate interest rate policy is most concisely summarized as allowing the rate of interest to vary within the limits which, at any time, prevent too high a proportion of Canadian lenders or borrowers from being attracted into the American capital market. It is by no means clear, however, that the movements of the interest rate which are implied by any given exchange rate policy will always lie within these limits.[18] The Bank of Canada must therefore be prepared, if it wishes to pursue exchange rate policy in a wholehearted manner, to purchase or sell very large quanti-

[17]This differs somewhat from the "orthodox" account of these matters, as expressed, for example, in the Bank of Nova Scotia News Letter, February-March, 1954.

ties of bonds of various maturities. It must be prepared, too, to prevent its actions having inflationary repercussions, and this may imply separate control of bank assets and advances in the manner already described. And it must, above all, have a sufficient volume of exchange reserves to enable it to pursue its policy in a steadfast manner.

Conclusions

This paper has attempted to work out the implications of recent changes in the Canadian capital market on the assumption that the close connection between American and Canadian markets makes an independent Canadian interest rate policy unpalatable. It has suggested various devices which might be employed by the Bank of Canada if it chose to conduct an independent monetary policy without undertaking an independent policy with respect to the rate of interest. All these devices involve a certain compartmentalization of the capital market, and so reduce its efficiency as an allocator of resources. In considering whether or not to use them in any practical case, one must weigh up the disadvantages of reduced allocative efficiency against the advantages of greater overall control. In most of the post-war period the balance of advantages has been overwhelmingly on the side of greater control.

The need for protection of the Canadian capital market has been assumed rather than proven. It may be that the capital market could have easily sustained any strains which were likely to be put upon it during the post-war era. Indeed, the existing structure of the capital market was never, in fact, in any danger. All that was threatened was the *further* growth and *increasing* perfection of the market—things which could, at best, have provided rapidly diminishing returns for advantages foregone.

Epilogue

The foregoing is a somewhat shortened version of a paper written in the fall of 1954. Since that time the problems it outlines have come into the centre of the public stage with the re-emergence of inflationary

[18]The deflationary effects of a rise in interest rates in Canada will be greatly reinforced if it results in a rise in the exchange value of the Canadian dollar. This rise in exchange value will be doubly welcome, under our assumptions, if it makes some Canadian borrowers fearful of a future fall of the exchange, and hence less willing to shift their borrowing operations to the United States than they would otherwise be under the incentive of a high Canadian interest rate. If this is the way things work out in practice it obviously means that there is more scope for an independent Canadian interest rate policy than appears at first sight. It must be remembered, however, that expectations vary from group to group, so that there is no guarantee that the expectation of a fall in the exchange will just balance the disadvantages of higher interest rate charges in Canada in the minds of the relevant Canadian borrowers, although it may be so for the market as a whole. There remain, on our assumptions, limits within which central bank policy must operate, but they now become rather more shifting and elusive if stated in terms of the level of interest rates alone.

pressure, this time rather more pronounced in Canada than in the United States. For although the government has allowed a budgetary surplus to accrue, and has allowed the value of the Canadian dollar to rise substantially, its main reliance has been on monetary control. In part, this is probably no more than political expediency; but to some extent it is the usual Canadian practice of following foreign fashions.

Faced with this task, the Bank of Canada has indeed allowed Canadian interest rates to rise, both absolutely and, to some extent, relatively, to those in the U. S. But this has not apparently been sufficient to prevent the chartered banks from unloading securities when faced with cash stringency. The Bank apparently felt the problem was too great to be met by the obvious technical expedients of refunding short term government bonds into long term issues and thus forcing the banks into the longer and less liquid issues. Nor was there any attempt to increase cash reserve requirements and at the same time have government accounts buy up the securities dumped by the banks. Such measures would probably have had little effect in any event; and the Bank seems to have ignored the possibilities of meeting the situation in the ways suggested in this paper. There was instead a reliance on moral suasion to an extent greater than ever before. The chartered banks were "requested" to hold 15% of their total deposit liabilities in the form of cash, day to day loans, and treasury bills. But, even with this added weapon, the Bank of Canada has not used the chartered banks as its main instrument of policy. Perhaps the most important single means of control (until mid January) was the policy of pegging the rate of interest on NHA mortgages at a time when all other interest rates were rising substantially. One suspects indeed a certain lingering tenderness for the sensibilities of the chartered banks, who would no doubt find the role of policemen for the Bank of Canada rather difficult from the point of view of public relations!

Moral suasion has not, however, been confined to the banking system. Stock exchange dealers and consumer finance companies have both suffered "persuasion". In a similar fashion the issue of term loans of more than $250,000 by the chartered banks has been prohibited. This increasing resort to extra-legal pressure has disturbed many, and others have been worried by the apparent efforts of the Bank of Canada to circumvent constitutional limitations on federal action, particularly in the field of consumer finance. One may add that the positions of inside knowledge which these policies have created, and the consequent flurry of speculation, have not passed unnoticed.

These developments seem indeed to be a heavy price to pay for keeping Canadian interest rates relatively low. But if yields of 5½ to 6% on government bonds are unpalatable, one may ask why more stringent measures have not been taken, on the lines outlined in this paper,

to impose a more severe rationing of credit on the banks. The proximity and magnitude of the inflationary pressures in the United States would presumably be a sufficient guarantee that drastic action in Canada would not produce a slump.

This should be the moral of this paper. But I must add that recent experience has inclined me to certain second thoughts. Is it possible that monetary policy is, even at the best, much less useful than we once thought? Its great merit was originally said to be that it operated by raising the rate of interest and would thus affect only marginal investors, and so not disturb the efficient allocation of funds. This argument is weakened by the reflection that the effect on expectations as well as costs might be important; and it is made rather unconvincing as soon as capital rationing by the chartered banks becomes an important feature. For then the prejudice of the banks for old customers and proved success introduces a bias which, while perhaps acceptable in the short run, is regrettable when applied for a longer period. When we add to this "banker's bias" the inequities resulting from imperfections in the capital market the case for the "efficiency" of monetary policy appears destroyed. Some have even suggested that selective credit controls are necessary to redress to some extent the imbalances of the system. They might be helpful, too, in preventing a contraction in output in sectors in which (relatively immobile) resources are in fact plentiful. But if the arguments for selective credit control are attractive, they are also very dangerous. For with their advent we have departed altogether from the use of monetary policy and the banking system as a means of indirect control, a means of removing government from direct interference with business affairs. Instead we are using the chartered banks as unofficial agents of detailed government intervention. Detailed government control might indeed be acceptable if it were open, responsible control, subject to the customary legal restraints. But the use of the banks as intermediaries imposes all the disadvantages of bureaucratic control with none of the protection which we customarily expect.

If reliance on interest rate fluctuations and the general control of bank credit by the Bank of Canada is unwarranted, how shall we fight inflation? The most direct way would, of course, be through the politically unpopular income tax. But perhaps the most agreeable policy for meeting today's specific problem would be to impose for, say, six months at a time, a temporary tax to capital investment, or perhaps on those commodities complementary to capital investment. Such a tax might well be applied selectively. But if it were, the nature and extent of the selection would be known and measurable.

Statistical QUALITY CONTROL as a Management Philosophy

Dale L. Lobsinger

This story is one simply told. It is devoid of ponderous mathematical terminology which so often characterizes such descriptions. The author feels, however, that the SQC message should be reaching more of the busy executives, and he has employed an unadorned, non-technical diction to attract their attention. But he has one fear of such of such an approach, and against this he warns the reader. "Do not permit the simplicity of the methods to beguile your understanding of their erue efficacy!"

Some Thoughts on Variation

WHETHER it be a research specialist, a line inspector, or a Director of a Quality Control department, most people in Statistical Quality Control work are guided by a deep-seated recognition of three rather simple concepts:

1. All things and actions in life *vary.*
2. Generally, this variation can be *measured.*
3. The laws of mathematical probability provide a usable *pattern* in the data measured, which in turn allows for profitable analysis.

If one is to make fullest use of the SQC methods, these precepts must be well engrained. There will be constant refinements, of course, as well as unending change for the general approach to quality analysis. Central always, however, will be the three simple factors listed.

But do all things in this life vary? If they do, it means that no two things are exactly alike.

"But this can not be so", you may say, for you personally know of many things which are exactly alike—matched diamonds, two glass eyes, pistons in your car, ball bearings, light bulbs, house bricks, etc. We will agree to the extent that as far as average visual acuity is concerned many of these things *appear* alike. If we were to employ sensitive enough measuring devices, however, differences between these items would be detected. "But", you add, "for practical purposes, these differences are not important." Again we will agree, if the differences are relatively minute. All that is asked of you as a reader is that you recognize and acknowledge that there *is* a difference, even though it be of such minor degree as to require a molecular count to distinguish it.

Suppose, however, we apply this *variation* or *difference* concept to your business thinking by asking some questions. If your firm is one of 50 or more people, are the absentees the same each day and for the same reason? In your daily billing or bookkeeping work do you have the same number and kind of errors? Does your inventory activity present daily, weekly, or monthly problems of variability? Does each employee, yourself included, produce exactly the same volume and quality of work day after day? Do equipment and plant maintenance costs change week to week, month to month? Does the amount of scrap and rework on your production lines change from time to time; and do you know the extent and reason for this? Is the overtime work the same from one period to the next (and in this instance at a reasonable level)? These should be enough questions with which to impress you that variation is not only inevitable but also a prominent aspect of your business.

"Well, so what! We do have variation as a fundamental characteristic, but is that bad?" Here is where the non-technical as well as the technical businessman can gain a simplified and meaningful understanding of Statistical Quality Control as a helpful management philosophy. Variation in all things *is* inevitable, but to the modern executive this variation has particular significance only when it becomes *excessive*. This can be interpreted as meaning that our problems in life (economic, social, religious, ethical, etc.) are really nothing more or less than excessive variation from facility capacities—human and material. It is in this domain—that of measuring and controlling variability—that Statistical Quality Control concerns itself.

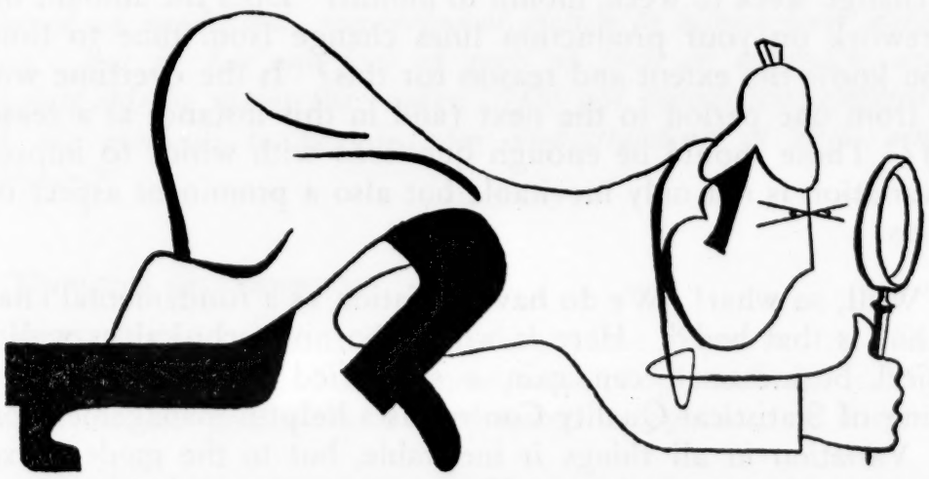
Sickness, for example, is merely a result of excessive variation from a normal state of physical well-being. The sore throat or headache is a minor change. Then it worsens with a rise in temperature. Ultimately lungs may become congested and body chemistry becomes upset to the point that we find ourselves stretched out on a bed. Moving again to business factors—we think of one or two absences from the plant as not too important. When there is an excessive frequency, though, a problem

results. Minor errors in billing or bookkeeping generally are not considered serious; but customers become unhappy when an abnormal rise in errors begins to effect them. Some overtime work beneficially fills a need for both the firm and the employee. A problem arises, however, when the amount becomes excessive. Slight inventory discrepancies are not too important. With hazy accountability and wide discrepancies, though, problems do exist.

These ideas are only attempts to convince you that *all natural phenomena vary.* Moreover, this applies equally well to the actions of people as to variability in material factors.

Using The Theory

An understanding of what the degree and nature of variation is in your business is not only desirable but actually essential, if you wish to be able to say with confidence that you 'know what is going on' in your firm. Many successful enterprises *do* have some effective methods of knowing about this variation; for if they had none, their enterprises would fade.



The real purpose of this paper, then, is to bring to your attention one of today's most effective measurement and analysis tools for business management—something with which to evaluate the significance of variation as described above. The name has already been mentioned several times, Statistical Quality Control. It is a relatively simple technology for controlling the quality of results in business, professional, and academic efforts—controlling, that is, at an agreed economic level.

Basing it's approach on the theme of variation, SQC has as a prime objective the measurement of changes in the manifold aspects of business. In so doing, one of the first questions encountered is how much of the variation can a Quality Control man *afford* to measure. This question takes account of the fact that often if you attempted to record each

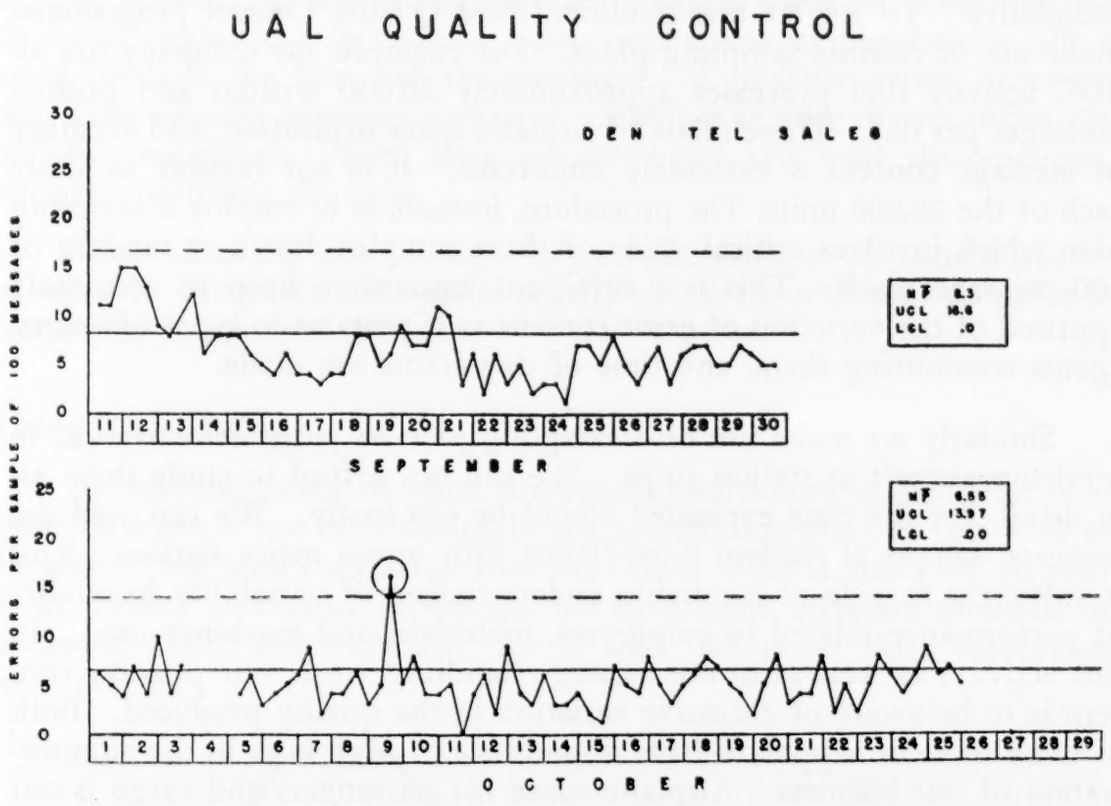
instance of variance, the cost of the measurement effort itself would be prohibitive. To answer this condition most Quality Control programmes make use of reliable sampling plans. For example, my company has an SQC activity that processes approximately 20,000 written and printed messages per day. These relate to airplane space utilization, and accuracy in message content is extremely important. It is not feasible to study each of the 20,000 units. The procedure, instead, is to employ a sampling plan which involves critical study of three samples drawn at random of 100 messages each. This is a sufficient amount to keep us accurately apprised of the variation of error content as it pertains to types of errors, agents committing them, and time of day errors are made.

Similarly we make use of a sampling plan to judge effectiveness in servicing aircraft at station stops. We can not afford to study them all in detail, for the time expended would be too costly. We can, and do, however, sample at random three flights daily at our major stations. This is sufficient to give us a reliable understanding of variability in quality of performance related to employees, materials, and machines used. In this activity, as well as in the message handling work, our primary concern is to be aware of excessive variation in the quality produced. Both of these services happen to have importance of high rank in the administration of our business. Airplane space for passengers and cargo is our only saleable product and nothing is of less value to us than an empty seat after the airplane has been dispatched. Errors in messages controlling this space must, accordingly, be held at a minimum, if utilization is to be maintained at a profitable level. In the airplane servicing work, also, we have at stake highly important aspects of the operation; namely, maintaining mechanical soundness in the aircraft itself, and keeping flights on a dependable schedule. This is no small chore in flying approximately 940 segments each 24 hours.

Charting

What form does this method of data measurement and observation take? Charts best clarify the answer. Figure 1 is known in Quality Control parlance as a control chart. In this instance it pictures the variability in numbers of reservation (space) messages with errors in the three samples of 100 messages each which are studied daily. The left hand scale indicates numbers of errors in each sample of 100. Note how variation shows up clearly *between* samples and from day to day. Incidentally, this same type chart could be picturing just as well the number of defective parts, per sample of 100, being produced from a high speed grinding machine in a manufacturing plant. In both instances variability is the key interest for the purpose of judging extent of defective work (scrap). In each case, moreover, a data sheet is concomittantly prepared to describe the nature of the error or defect. And the whole process is

Figure 1



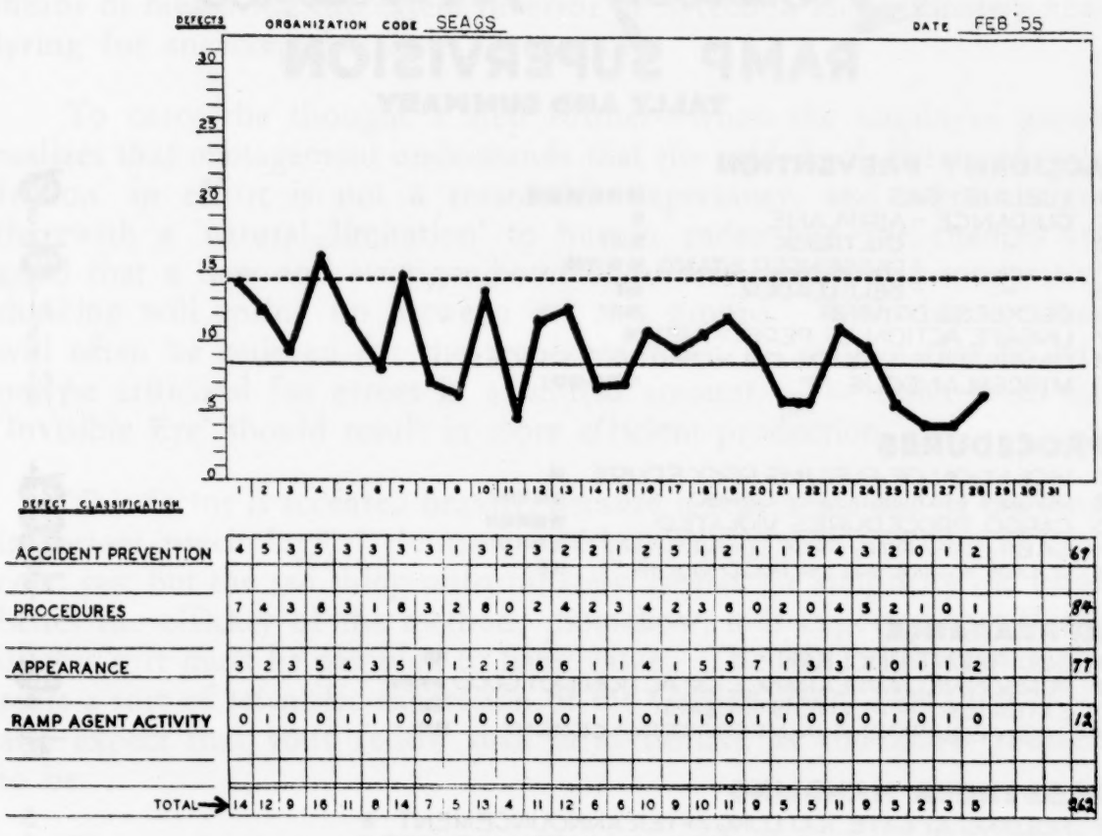
just this simple! The chart shows the extent of defective performance, and the data sheet will tell such things as the who, why, when, where, and what, of the trouble. Following this, the experience and know-how of supervisory personnel involved enable them to take corrective action through training facilities, or make the indicated management decision.

A rather unusual value, of a by-product nature, also shows up in Figure 1. You will notice a circled point plotted for the 9th of October. This is just above a broken line known as the upper control limit of the chart—a line statistically computed to show the normal extent of variation to be expected in work of this nature. On the 9th the point is 'out of control'. It represents errors found in the samples on the first day a former employee returned to work after an absence of six months. It had been assumed that this person, with seven years of past experience, would be well qualified to jump right back into the work. It became obvious at once, though, that the lay-off had made him rusty, and a refresher session was ordered on the basis of excessive variation shown for him during the first day back. Review of samples for that day pointed clearly to the fact that this man was contributing most of the defective work.

Figure 2 illustrates a slightly different form of control chart in which the variation is shown in terms of defective actions or conditions related to evaluations of airplane servicing during a station stop. Each

Figure 2

QUALITY ASSURANCE- RAMP SUPERVISION



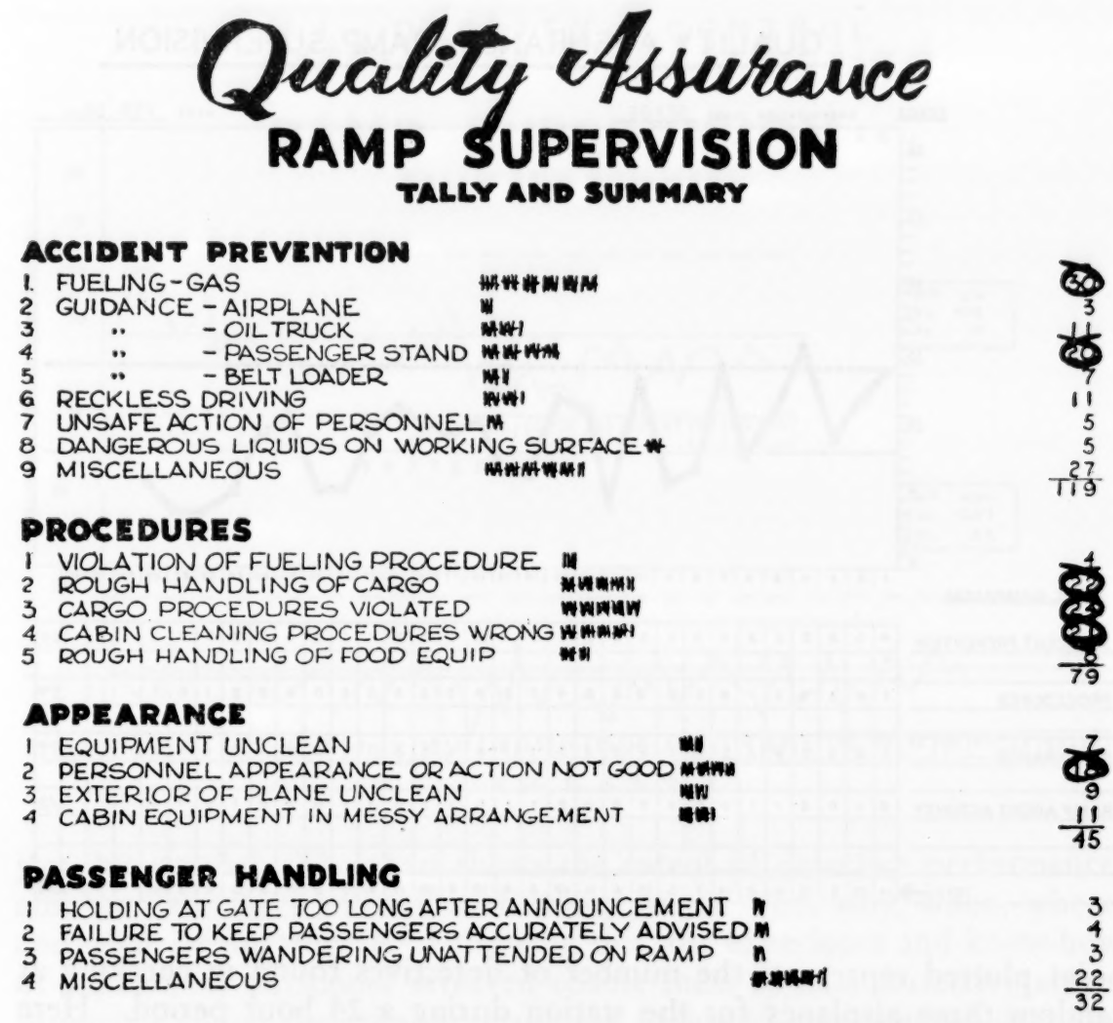
point plotted represents the number of defectives found in checking at random three airplanes for the station during a 24 hour period. Here you see a slightly refined method of breaking the data into four major areas of management interest—Accident Prevention, Procedures, Appearance, and Ramp Agent Activity. The first plotted value, for instance, is 14, which divides into four defects in the Accident Prevention area, seven for Procedures, three in Appearance, and none for Ramp Agent Activity.

Once again we have an example of the inevitable variation noted previously as being characteristic of all activity. In this particular work you might find an additional interest in the Summary and Tally form, Figure 3, to which the observed data is posted. Note how this makes for an easily understandable arrangement of operating information which assists effectively for sounder management decisions.

The Personal and Human Side

During the past ten years the Statistical Quality Control techniques have aided significantly in the analysis and control of quality throughout a broad variety of industrial enterprises. Applications have ranged

Figure 3


Quality Assurance
RAMP SUPERVISION
TALLY AND SUMMARY
ACCIDENT PREVENTION
1 FUELING-GAS 60
2 GUIDANCE - AIRPLANE 3
3 " - OIL TRUCK 11
4 " - PASSENGER STAND 20
5 " - BELT LOADER 7
6 RECKLESS DRIVING 11
7 UNSAFE ACTION OF PERSONNEL 5
8 DANGEROUS LIQUIDS ON WORKING SURFACE 5
9 MISCELLANEOUS 27
119
PROCEDURES
1 VIOLATION OF FUELING PROCEDURE 4
2 ROUGH HANDLING OF CARGO 42
3 CARGO PROCEDURES VIOLATED 23
4 CABIN CLEANING PROCEDURES WRONG 8
5 ROUGH HANDLING OF FOOD EQUIP 2
79
APPEARANCE
1 EQUIPMENT UNCLEAN 7
2 PERSONNEL APPEARANCE OR ACTION NOT GOOD 16
3 EXTERIOR OF PLANE UNCLEAN 9
4 CABIN EQUIPMENT IN MESSY ARRANGEMENT 11
45
PASSENGER HANDLING
1 HOLDING AT GATE TOO LONG AFTER ANNOUNCEMENT 3
2 FAILURE TO KEEP PASSENGERS ACCURATELY ADVISED 4
3 PASSENGERS WANDERING UNATTENDED ON RAMP 3
4 MISCELLANEOUS 22
32

from the very simple to highly complex programmes, with the latter entailing a high order of mathematics and statistics. The successes have been notable. Moreover, the SQC movement is backed by a rapidly growing professional organization which now has some 94 chapters and 10,000 professional members spread throughout the United States, Canada, Mexico, Japan, India, and to parts of Europe. It is no 'fly-by-night' or 'shallow water' activity. In all of the highly commendable achievements credited to Statistical Quality Control, however, one of it's most powerful potentials has been but lightly developed—its potential for placing many of our complex and trying business relationships on a sounder human basis. Especially it can produce sounder employer-employee or supervisor-worker relationships.

The phrase 'all natural phenomena vary' applies to the thoughts and actions of people—all people. "To err is human—" can be accurately paraphrased "to *vary* is human". Such is the simple but efficacious truth—one that all levels of industrial men would do well to place high in their philosophy of management. For whether they like it or not, and despite all of their preventive effort with economic reason, errors

(variation) will exist to a greater or less degree. The attractive feature of associating this gem of philosophy with the methods of Statistical Quality Control is that the latter afford one of the most promising means of measuring the extent of error or defection and ultimately analyzing for an acceptable level of control.

To carry the thought a step further—when the employee group realizes that management understands that the cold, hard dictum of 'perfection' in effort is not a reasonable expectancy, and acknowledges therewith a 'natural limitation' to human endeavour, the chances are good that a new and stronger bond of understanding and cooperative thinking will spring up between the two groups. With this, tensions will often be relieved for the employee when he realizes that he will not be criticized for errors in a limited amount. The relief from the 'Invisible Eye' should result in more efficient production.

This factor is accented heavily, because it represents one of the most important psychological elements which motivate men. A simple concept, yes; but the sad thing unfortunately, is that the simplicity too often belies the efficacy of the method. Somehow, it is expected that things of this sort must be complex to have value. The SQC viewpoint represents a sort of scientific expression of the Golden Rule: "Do unto - - -", and expect that your fellow man is as fallible as you know yourself to be.

Placing SQC charts in various realms of business activity provides a means for focusing attention on the individual—giving the latter some identification. Most of us are aware that the rapid spread of automation during the past decade has contributed much to lost identity of the individual in the general production scheme. It has caused him to lose that sense of 'belonging', which is a need of great importance to the average man. But we bring the individual back into the picture when we describe his work and indicate his thoughts through the charts and data sheets of SQC. A basic need is satisfied. Man wants to be *recognized* as 'belonging'. On this the famous Dostoyeski once cogently observed: "If the desire is to reduce man to nothing, it would be required only that we assign to his work the character of uselessness".

Establishing Standards

The question of what constitutes good or bad performance is one that is ever present. What should we expect in terms of error levels or scrap? Is there a way that management can know when personnel and facility capacities are reached? In seeking answers to these questions, Quality Control people are finding that the SQC methods are helping considerably.

As an example, the work on space control messages previously noted posed the usual question about 'What is acceptable performance'? We knew, to begin with, that we could not really satisfy ourselves concerning the quality and capabilities of the process until a measurement was devised to show its variability. Control chart techniques served excellently for this purpose. Once these had pictured process behaviour, the first step of setting a standard was accomplished. From that point on job know-how, experience, common sense, etc., were invoked to remove assignable causes which created abnormal fluctuations. This was continued until variation was reduced to what was considered an economical minimum. Then, and not until then, could we know what a realistic standard was; only then could we know the quality of which the process was capable.

When you reach this stage, the basic philosophy of SQC becomes more meaningful. First of all, the phenomenon of inevitable variation is recognized as a natural characteristic of all processes. Secondly, this means that the work perfection so often talked about and so often sought in vain is an impossibility. By coupling these two concepts it becomes apparent to management that a standard is pretty well fashioned by the process itself, after all assignable causes of defection are removed. It is not something to be imposed arbitrarily by personal will.

Perfection in work, it is suggested, must not be totally stricken from management thinking. It is the inspiration to guide the world's progressive effort. But in industry it should be handled realistically—as a psychological aid rather than an edict. With it one must be careful to recognize human limitations, otherwise there is a tendency to push employees beyond natural capacities, and this generally foments organizational discord. The SQC tools, skillfully used, help us move closer to perfection—sometimes surprisingly close. It is always important to remember, though, that "to err (to vary) *is* human".

The Field Is Broad

Regarding monetary or practical results from employing the SQC methods in business, the literature of progressive business groups has an ample stock of 'success stories'. The basic and very logical human factors underlying the statistical science which SQC is offering as one of the most potent aids to modern business have been preferred and emphasized deliberately in this article. However, the financial field is broad and worthy of cultivating. One area of 'money' success in our company is about food. For a number of years the cost of wasted food in excess of demand by airplane passengers had been very disturbing to us. Not long ago the figure was $192,000.00 per year. Using some statistical sampling in the ordering process we brought to light the extent and areas of abnormal fluctuations. This added information enabled us to

reduce waste by 75% within a year. Continued measurements through SQC sampling make it possible to hold the line in waste from one year to the next.

Opportunities for employing SQC philosophy and techniques seem endless. Our company has introduced the methods to accounting work, ticket sales, space control, food ordering, air freight billing, aircraft delays, aircraft maintenance, inventory control, supervisory evaluations, etc. These fields are relatively new to SQC, but from our viewpoint they constitute only the beginning. There are important things, for instance, that probably could be done in the area of personnel administration. Much seems feasible also where administrative reporting is concerned. The latter has been ably pointed out by Charles Bicking who has done some fine pioneering.[1] As indicated by Mr. Bicking, it is entirely possible that standard practice in the future could be to restrict periodic reporting of business affairs to a vastly simplified review of SQC charts. Just something to tell the facts—with a few pertinent recommendations added.

Conclusion

In the Harvard Review (September-October, 1954) Irwin Bross stated that the symbiosis of business and science has been "an association that not only is largely responsible for the technological world in which we live, but has led to the most important (and least publicized) intellectual achievement of the twentieth century—statistical decision". Today's executive must heed but the statistical decision comes only from the measured data of variation. And variation is a characteristic of everything we know in this world. This concept is not a gimmick to be sold at a profit by some enterprising purveyor. Instead, it is a simple and powerful philosophy uncovered by today's academic and scientific brains. The knowledge can be anyones, usually for the asking.

As a friendly nudge in closing, I suggest:

If you do not know the extent of waste, errors, or defects (variation) in your business, you do not know as much about your responsibilities as you should.

If you expect perfection of your employees, the chances are good that you pressing them too hard and are unrealistic.

[1]"The Application of Quality Control to Administrative Problems" — Industrial Quality Control, May, 1950.

Lies, damn lies and MISINTERPRETED STATISTICS

A. E. Safarian

THE production and publication of statistics is a complex process involving many intricate choices. In this task, the statistician can benefit greatly from informed suggestions by the users of the data. That the Dominion Bureau of Statistics is well aware of the benefits of such comment from persons outside the Bureau, and that it is constantly appraising possible improvements in the nature and presentation of its series, must be evident to those who have followed the recent history of that organization.[1]

The article by Mr. Stuart Armour in the Business Quarterly of summer 1956 entitled "Lies, Damn Lies and Statistics", purports to show according to editorial comment, "the dangers that easily arise from delayed and often misunderstood, indeed misrepresented figures". Such dangers do exist, indeed. Many of Mr. Armour's observations on the timeliness, presentation, and nature of Canadian statistics, however, far from enlightening the reader on these points, are likely to lead to considerable confusion on the issues involved.

The gist of his argument on timeliness is that the earlier availability of the major statistical series would assist economic policy makers in appraising fluctuations in the economy, and therefore in making correct policies with respect to such fluctuations. No doubt this is true. The author admits that "our statistical series are now much more current than they were even five years ago". It is perhaps well to emphasize the magnitude of the change which has occurred in this respect. About

[1]See, for example, "The Role of Statistics in the Foundation of Policy by Business", proceedings of a Symposium held at the 16th Annual Meeting of the Canadian Political Science Association in Winnipeg (Ottawa, 1954) and the article by S. A. Goldberg and F. H. Leacy, "The National Accounts; Whither Now?", *Canadian Journal of Economics and Political Science,* February, 1956, pp. 73-91. In addition to such published work, the Bureau maintains continuing contacts with other government departments, business and other domestic users of its data, and statistical institutions and government agencies abroad—all with a view to improvemen in the quality of its statistical output.

mid 1953, the publication of two important aggregative series, the national accounts and the balance of payments, was changed from an annual to a quarterly basis. Quarterly data for several years previous to 1953 also were made available. Many other important examples of improved timeliness could be cited.

How can timeliness be further improved? Mr. Armour implies something might be done to speed the return of questionnaires from some members of the business community, although he does not specify what he has in mind. He also suggests that Ottawa issues statistical material more slowly than Washington. The United States quarterly national accounts (and therefore the first comprehensive picture of the full year) are released about one month ahead of the Canadian series. His further comment on the Canadian data for 1955 issued in March, 1956 ("and then only in 'preliminary' form") suggests, however, that he is not aware of an important difference between the Canadian and United States series which helps account for the earlier appearance of the latter. Without wishing to detract in the least from the achievement of the United States statisticians, one might suggest that Mr. Armour's qualification might more accurately have been applied to the United States data. The Canadian data for the first three-quarters of the year, for example, include the results of the quarterly survey of corporation profits; in the United States this very volatile item is apparently, in the first instance, a rough estimate. A speeded-up approach in Canada is not impossible, provided it is clearly recognized that the extent to which the statistician can push estimation techniques in the interests of timeliness of statistics must be limited by the extent to which the quality of the data deteriorates in the process.[2] Such volatile items as corporation profits and inventory change, for example, are likely to prove troublesome precisely at the turning points of business activity.

Mr. Armour also leaves the impression that while the United States data for 1955 were "fully reviewed" at the end of February 1956, the Canadian data for 1955 had not been "fully review" ever after mid April of 1956. Actually, the report released in Canada in mid March of 1956 included a comprehensive analysis of developments in 1955, as well as several annual tables which do not appear in other quarterly reports. In both countries, "final" reviews appeared about mid July.

[2]The following comment from the August 4, 1956, issue of the Economist (pp. 386-87) is relevant in this regard: "The American statistician, intent on getting out more statistics more quickly, is resigned to a considerable amount of revision. This goes beyond the likelihood that figures produced early are provisional . . . There is no escape from the broad choice: speed against reliability". The Economist goes on to suggest, however, various areas in which the scope and timeliness of United Kingdom data need improvement; in several of these areas, United Kingdom data appear to lag considerably behind both the United States and Canadian equivalents.

Whether it would improve the usefulness of the data to put the more current figures ahead of those for previous periods would depend on the uses to which the data are put. To those who are interested in picking out the most recent figure, this system would probably be preferred. Those who read a statistic in the context of previous statistics would probably prefer the generally accepted method applicable to other types of reading, i.e. from left to right and top to bottom. It might be added that most similar publications use this system; for example, the United States Survey of Current Business, the United Kingdom Monthly Digest of Statistics, and the United Nations Monthly Bulletin of Statistics.

No Comments, Please

Mr. Armour voices two objections to the commentary which accompanies statistics. First, "it was contended that a government should confine its activities to the collection, collation, and dissemination of statistics, and should leave comment upon them to others not employed by the State". No such limitation is envisaged in the Statistics Act—fortunately for the statistical literacy of the country.[3] Indeed, a frequent criticism of the Bureau's analysis is not directed against the fact of analysis as such, but rather at the purely descriptive nature of much of the analysis. A number of sections of the Bureau have achieved a continuously high standard in regard to statistical commentary; in my view, the rest should be encouraged, and given the qualified personnel where necessary, to do the same. This view would apply even more to those agencies of government which now issue little or no commentary on their statistical series, or on the institutional environment in which such series can be comprehended. The person who is closely associated with the production of the data, with his knowledge of the intricate concepts involved and of any limitations inherent in the data, is often in a peculiarly good position to make a contribution to our understanding of changes in the statistics. Moreover, the statistician-economist can add to our understanding and economize our time by bringing out many of the relationships which make the statistics meaningful. I am well aware that there are limits to which the public employee should push his analysis for government publication, since there is room for differences of opinion on the interpretation of economic events. There is, however, considerable room short of this limit for objective assessment of quantitative matters in economics. Mr. Amour might well look again at the United States Survey of Current Business, which generally puts our equivalent Canadian publication to shame in this respect.

[3]According to Chap. 45, section 3(a) of the Act (11-12 George VI) the Bureau is required, among other duties, "to collect, compile, analyse, abstract and publish statistical information relative to the commercial, industrial, financial, social, economic and general activities of the people".

This brings us to the second of Mr. Armour's objections with respect to commentary on statistics. He refers to "the disposition of Ottawa to draw conclusions—usually rosy ones— from its statistics".[4] The one example he cites is that "All through the boom year 1955, the figures were compared with the recession year 1954, and seldom if ever with the boom year 1953". The context of the paragraph, as well as the article as a whole, clearly suggest that this shaft is aimed at the national accounts publications or the summaries of them in the Canadian Statistical Review and the Daily Bulletin. A check showed that, with one exception, every relevant issue of each of these three publications for 1955 contained at least one, and often more, comparisons between 1955 and 1953 data within the first two pages. (The sole exception was the summary of the national accounts for the first quarter of 1955 which appeared in the Daily Bulletin of June 15, 1955.) Some of these comparisons were with the full year 1953, some with the same quarter of 1953, and some (quite properly) with the seasonally adjusted peak quarter of 1953. If the author still considers that his specific accusation of bias is justified, he might ponder the significance of the fourth quarter 1954 report in both the National Accounts and the Canadian Statistical Review, where the decline from the 1953 peak quarter to the 1954 low quarter is examined. As to the relevance of the various quarterly 1954-55 comparisons as such, it hardly seems necessary to add that they cannot be ignored in any comprehensive survey of economic changes in the period. Those who object to such comparisons as giving too "rosy" a picture would also have to argue that the 1953-4 quarterly comparisons were objectionable because they showed a greater decline than was actually the case.[5]

The author does not stop at the charge that DBS commentary is biased, but also suggests that the issuance of statistics has sometimes depended on their political effect. No statistical series or occasions are specifically mentioned; the claim is ascribed vaguely to "some businessmen of suspicious mind"; and the only "proof" submitted by the author is the suggestion that this procedure would be consistant with efforts to paint a rosy economic picture—a claim which was examined above. If such serious charges are to be laid against an agency with the high reputation for objectivity which the Bureau has developed, surely something more than innuendo is called for.

GNP and the National Accounts

Finally, the author turns to a direct critique of some concepts underlying the national accounts. Obviously, breakdowns of such aggregates

[4]Ottawa and D.B.S. are interchangeable terms in Mr. Armour's article.

[5]Mr. Armour relates his comment on the 1954-55 comparisons specifically, though not exclusively, to constant dollar per capita figures. This concept is probably not the best one for measuring short-term cyclical change, although it is particularly useful for longer-term welfare analysis.

as those involved in gross national product and expenditure are necessary for different purposes. To this end, some fifty tables are given in each annual report, detailing different aspects of the major GNP and GNE tables. Here again a number of changes in the national accounts could be examined profitably. One must admit to some confusion, however, in considering the changes which Mr. Armour suggests. To begin with, undistributed corporate profits are not included in "depreciation allowances and other business costs" (p. 110); even a cursory reading of the national accounts tables and text, not to mention the quotation which he himself makes from the national accounts (pp. 109-110) should convince him of this. Secondly, he suggests that indirect taxes and depreciation allowances should be excluded from a measure of "our progress and prosperity", or a measure of "goods and services produced". If what this means is that the resulting measure (net national income at factor cost) is particularly useful for some purposes, one could readily agree.[6] But what he apparently means is that the GNP is not an attempt to achieve an internally consistent measure of goods and services produced at market prices. Again one must take exception to his views. The first few pages of Part II of National Accounts, Income and Expenditure 1926-1950, set out in succinct (perhaps too succinct!) manner the framework in which national production at market prices is estimated, through the cost and expenditure approaches. It does not require an act of faith to grasp the fact that this framework is designed to yield an unduplicated measure of national production at market prices. To make the matter quite explicit, one need only imagine the plight of a firm which was unable over time to reflect in its market prices the costs involved in depreciation and indirect taxes, not to mention any necessary retained earnings.

The author finally suggests that, in his view, the best existing measure of "national progress" and "the economic health of a national economy" is personal disposable income on a constant dollar per capita basis. Personal disposable income consists of personal expenditure on consumer goods and services and personal saving. The concept of personal disposable income is obviously of particular use in helping to measure the welfare of the personal sector of the economy. Its importance is recognized in various ways in national accounts publications: the derivation of the concept is shown in the summary tables appearing at the beginning of the statistical section of the annual reports; the sources and uses of personal income are given both annually and quarterly; the geographical

[6]This measure is shown as the only subtotal in the first table of every publication of the national accounts, and given in detail by industry in the annual issues. Another measure, net national product, consists of GNP minus depreciation allowances and similar business costs; it is not shown separately in Canadian data, but easily derived from it. Both these measures must be considered in relation to the problem of measuring depreciation at current cost. Both have particular uses, the former as a measure of factor costs of production, the latter as a measure of income net of the capital consumption required to produce it.

distribution is given annually; and it is the subject of separate textual comment both annually and quarterly. To give priority to this concept over the more inclusive GNP-GNE figures, however, is surely to defeat the very ends which Mr. Armour is seeking to secure. Any comprehensive indicator of "the economic health of a national economy" can hardly avoid direct consideration of the state of exports, domestic investment and government expenditures. And concern with the present level of personal real income should not lead one to lose sight of the contribution which other forms of saving (along with personal saving) are making through domestic investment to future real income. Such considerations would lead one to emphasize the overall GNP-GNE aggregates and their derivates in the national saving and investment account, with further analysis of such components as consumption and personal savings as required—rather than vice versa.

How to Lose Money in Bonds

Plummeting bond prices and soaring interest rates are tempting investors into bonds, despite the danger that inflation and the annual fall in the value of money may turn an apparent return on money into a negative rate of interest. The "real rate of interest" in various countries, derived by subtracting the annual depreciation of money from the interest earned, is shown in the attached table, derived from the monthly letter of the First National City Bank of New York.

Rates of Interest and Depreciation of Money

	(1) Indexes of Value of Money*		(2)	(3) Annual Rate of Deprec.	(4) Rates Offered on Government Bonds†		(5)	(5-3) "Real Rate of Interest"
COUNTRY	1946	1956‡		(comp'd.)	1946	1956‡		1956
Switzerland	100	86		1.5%	3.10%	3.23%		1.73
Germany	100	72		3.2	n.a.	4.90		1.7
India	100	72		3.2	2.88	3.98		.78
United States	100	71		3.4	2.19	3.27		-.13
Venezuela	100	70		3.5	n.a.	3.63		.13
Netherlands	100	67		4.0	2.99	4.10		.10
Canada	100	65		4.2	2.61	3.88		-.32
South Africa	100	65		4.2	2.89	4.75		.55
Sweden	100	65		4.3	3.01	3.74		-.56
United Kingdom	100•	65		4.6	2.76•	4.86		.26
New Zealand	100	59		5.2	3.01	4.73		-.47
France	100x	58		6.5	4.26x	5.48		-1.02
Mexico	100	47		7.4	10.44	10.12		2.72
Australia	100	46		7.5	3.24	5.04		-2.46
Brazil	100	26		12.7	n.a.	12.00		-.7
Chile	100	5		25.3	9.22	13.82		-11.48

Note: Depreciation computed from unrounded data. n.a. not available. *measured by rise in official cost of living or consumers' price index. ‡latest month available. †except for mortgage bond yield in Germany, commercial paper in Venezuela and Mexico, and commercial bank loan rate in Brazil and Chile. •1947. x1948.

Selling at TRADE SHOWS

A Blind Spot in Marketing

Donald H. Thain

In a nation-wide study of over 50 leading manufacturers, Dr. Thain found that industrial trade show exhibiting is one of the least understood and consequently most misused marketing tools. Nevertheless, the potential sales promotion value of exhibiting can be considerable under a given set of conditions. These conditions and other information about the trade show field are discussed in this article in the following sections: (1) definition of an industrial trade show, (2) its effectiveness in sales promotion, (3) the uses of exhibiting, (4) major operating problems in exhibiting and (5) conclusions on exhibit effectiveness.

"TRADE show exhibiting is a dead loss without insurance!" "Definitely our most effective marketing tool." "Just a free drunk for our salesmen . . . we exhibit only because our competitors do." "Trade shows give us the best available coverage of our markets." These statements are a typical sample of the considered conclusions of many experienced marketing executives about one of the most controversial blind spots in marketing—trade show exhibiting.

Reliable research information about the field has been practically nonexistent. Many marketing executives frankly admit that major exhibiting decisions, often involving thousands of dollars, are based on nothing but unfounded opinions and pet prejudices. As a result, many top management executives look down on exhibiting through a cloud of skepticism, uncertainty, confusion, and apathy. However, on a more careful examination of the exhibiting field, certain useful current generalizations stand out.

1. INDUSTRIAL TRADE SHOW DEFINED

An industrial trade show is a periodic exhibition of industrial goods by competitive manufacturers to a concentration of visitors who have a business interest — presumably potential buyers or users — in the products exhibited. The public is not usually admitted. Examples of

this type of show are the Machine Tool Show, National Packaging Exposition, or the Materials Handling Exposition. In common usage, the terms "show", "fair", "trade show", "industrial trade show", "exposition", and "industrial exhibition" are interchangeable.

The broad exhibiting field, of which industrial trade show exhibiting is but a segment, includes many diverse types of competitive exhibitions of consumer and industrial goods. These gatherings vary in size and coverage from small church-bazaars to immense internationally publicized and attended expositions.

This article is primarily concerned with the industrial trade show field: it does not explicitly consider general public exhibitions, agricultural fairs, international expositions, buyers trade shows, permanent exhibits,[1] hotel room shows,[2] travelling exhibits,[3] and the like. However, with very few exceptions, the basic purpose of all exhibitions is the same—to bring a group of exhibitors, who are seeking to sell or advertise their products, together with a concentrated audience that either immediately or ultimately will purchase or influence the purchase of these products. In view of this commoner characteristic, the conclusions presented in this article have wide application to other segments of the exhibit industry in Canada and other countries.

[1]Permanent exhibits are displays maintained by organizations on a permanent basis, usually near tourist attractions or other high traffic locations.

[2]Hotel room shows are small exhibits set up in hotel rooms, usually to attract retail store buyers.

[3]Travelling exhibits are displays which are transported via trailer or train to various localities for exhibition to local audiences.

2. EVALUATION OF THE EXHIBITING MEDIUM

Advantages of Exhibiting

Exhibiting has several advantages over other promotional media. The prospect comes to the exhibitor; some trade shows offer highly selective and concentrated markets; the three-way combination of product, salesman, and three-dimensional display can achieve a high impact on prospects; ideal conditions for product demonstration are available; and exhibits can be used effectively for a number of different purposes.

1. *The prospect comes to the exhibitor.* As one advertising manager expressed it, "Contrasted with all other media, at a trade show you can look your prospect in the eye, introduce yourself, and shake his hand. You know right on the spot who you are talking to and whether you are meeting real prospects!" The sales manager of a large machinery company stated, "This allows a salesman to size up the prospect and tailor the sales pitch to his needs. In some instances, when handled skillfully by a capable salesman, a booth contact can be as valuable as a call to a prospect's office . . . and this type of contact can be made at a fraction of the cost of a regular sales call".

The psychological situation surrounding an exhibit contact is favorable to the seller. Show visitors take time from their regular businesses and frequently travel considerable distances, all at their own expense, to attend. This they do in the expectation of learning something about products and services that will enable them to operate their own businesses more efficiently. As a result, the usual buyer-seller relationship is reversed: the buyer is calling on the seller in possibly a more receptive frame of mind than that prevailing in the usual atmosphere of sales contacts.

2. *Certain trade shows offer selective and concentrated markets.* Many executives report that certain industrial trade shows are the "meeting places" of their industries. As such, these shows afford a large and concentrated group of users, customers, and prospects. Also, many industrial trade shows offer highly selective coverage of specialized or technical personnel in various fields. Since such groups are usually composed of high-level people, they represent great buying influence. Obviously, the exhibit manager with initiative, enterprise, and enthusiasm can use such opportunities to excellent advantage.

3. *The three-way combination of product, salesmen and three-dimensional display can achieve high market impact.* Several manufacturers have proved this conclusively by careful research. It is effective first in securing the interest of a high percentage of the total visitors at a show and then in impressing interested prospects with long remembered sales appeals. It is doubtful if the impact of many trade show contacts could be duplicated by any promotional means short of a personal sales call.

4. *Ideal conditions for product demonstration are available.* To companies which produce large machinery, exhibits offer a unique opportunity for demonstration. The only alternative method of demonstration for many such manufacturers is to take a prospect to see an existing installation in operation. Because of the relatively small number and territorial spread of certain types of installations this is not always feasible. Moreover, at a show demonstrations can be made by expert personnel and often to groups of 15 to 20 or more visitors at a time.

5. *Exhibits can be used for many different purposes.* A large chemical manufacturer which specialized in research and new product development had four separate purposes in exhibiting in the Chemical Show; to contact present customers, to find prospects for present products, to "feel out" the market for leads as to new product possibilities, and to find new sales agents.

Disadvantages of Exhibiting

Naturally, exhibiting has its disadvantages. In summary, the most important and frequently mentioned are the inconveniences of periodicity and inflexible timing, the presence of competition, a lack of adequate information about exhibiting, the fact that results are chiefly intangible, and the difficulties involved in appraising results.

1. *The periodicity and inflexible timing of trade shows may be a serious disadvantage.* Shows are held too frequently for many exhibitors. The considerable expense, effort, and inconvenience involved in exhibiting more often than they wish is a real disadvantage. On the other hand, the relatively long time between annual or biennial shows makes it difficult, if not impossible, for a manufacturer to use exhibits as a major media in a sustained promotional campaign. This factor also obviously reduces the potential total impact of the medium as compared with trade journals or other more frequently available promotional media. More often than not new product announcements could not be timed to tie in with a show.

2. *Competitive companies are usually present and have the same promotional opportunities.* This, of course, is true of nearly every other type of promotion. But, nevertheless, the negative feeling expressed by so many exhibitors, "We exhibit because our competitors do!" seems to be more

frequently a factor in the use of exhibits. Also, according to several trade show industry executives, exhibiting has degenerated in certain cases to competing on the basis of more elaborate displays and to be losing sight of the basic importance of personal market contact.

3. *There is a great lack of factual information, such as attendance statistics about most trade shows and about exhibiting generally.* Lack of such information renders exhibit planning and operating less effective right from the initial stages of show selection to the final phase of evaluation of results. This problem was noted in every case studied.

4. *The benefits of exhibiting are chiefly intangible.* Seldom can exhibitors put their fingers on tangible, measurable results. As a result, beliefs about the worth or lack of worth of exhibits were typically based on "hunches", "impressions", "ideas", or "prejudices", except at wholesale and retail buyers' shows such as furniture, houseware, lamp, or gift shows, where large numbers of orders are written.

5. *Industrial trade show exhibit results are difficult to evaluate.* Of 50 industrial product manufacturers surveyed, only one reports immediate sales resulting from exhibiting. An exhibit is just part of the frequently long-drawn-out process of making a sale. In many cases, this costs more than executives believe it is worth

3. USES OF EXHIBITING

With varying success, firms use exhibits for the following purposes:

(a) *Meeting Competition*—Many companies report that to prevent competitors from "stealing a march" is their primary reason for exhibiting.

(b) *Institutional Advertising*—Many large exhibitors use exhibits primarily to enhance general prestige and keep their names before industry personnel.

(c) *Introduction of New or Improved Products*—Companies periodically take advantage of industry-wide trade shows to "kick off" promotions for new or improved products.

(d) *Market Coverage*—Exhibitors often use exhibiting as a means to increase market coverage and locate new prospects.

(e) *Market Penetration*—According to the marketing director of one large exhibitor, the opportunity to contact top management and other

influential personnel who would otherwise be inaccessible is often the primary exhibiting benefit.

(f) *Product Demonstration*—Many manufacturers of large machinery installations such as drop forges, bakery ovens, bottling machines, or textile weaving machines consider exhibits to be a unique opportunity to display and demonstrate their products. Many others report that exhibits offer ideal conditions to have factory trained personnel demonstrate smaller products to large groups.

(g) *Public Relations*—Several exhibitors feel obliged to enter certain shows to contribute to, or subsidize, what they believe to be a worthwhile industry enterprise. They thus seek to increase their acceptance among industry personnel.

(h) *Market Research*—A large chemical manufacturer is one of several companies which use exhibiting to locate unknown markets, to obtain ideas as to new uses for products, to "feel out" customer and prospect reactions to products, or to discover the needs of a market.

(i) *Establishing New Representatives or Dealers*—Companies that lack sales representation often use exhibiting to contact manufacturers' agents, distributors, or wholesalers who visit the shows to find new lines.

(j) *Announcements or Explanations*—Companies frequently use exhibits to announce or explain such things as price changes, special promotional campaigns, new policies, or supply shortages.

(k) *Branded Part Promotion*—Some companies use exhibiting to promote basic materials such as cans, primary plastics or metals to customers' markets for the following reasons: (i) to increase preference and build a reputation at the ultimate customer level, (ii) to influence customers to purchase primary materials from the exhibitor instead of other brands, and (iii) to support customers' sales promotion efforts.

(l) *Follow-up Contact with Customers*—Some companies, such as certain large machinery manufacturers who maintain little regular contact with past customers, use industrial trade shows to maintain follow-up contact.

(m) *Sales Force Meeting*—Several companies use industrial trade shows as an opportunity to hold meetings of their sales forces.

The degree of success achieved by an exhibitor in pursuing any of these objectives either singly or in combination was observed to depend on the size, quality, and interest of show audiences and his exhibiting effort and skill.

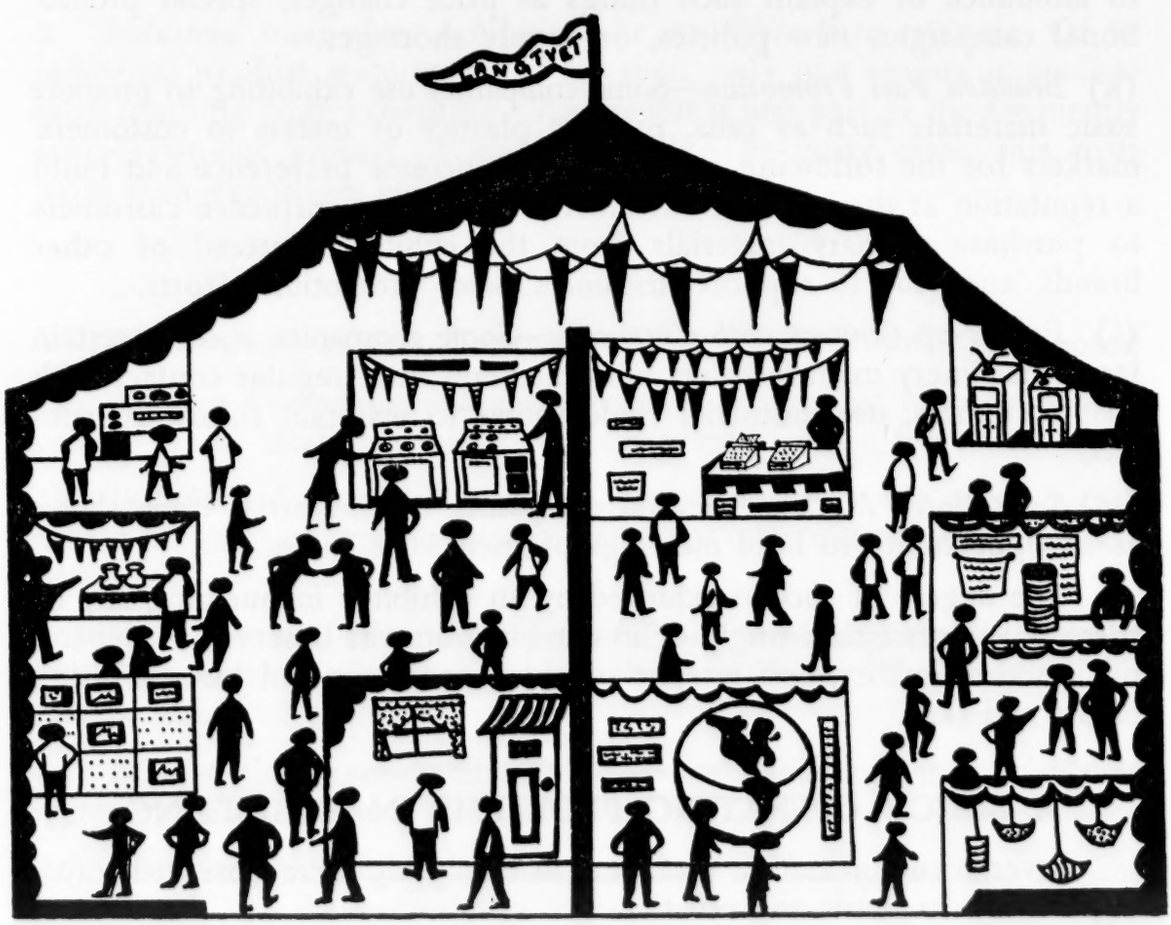
4. MAJOR OPERATING PROBLEMS IN EXHIBITING

Several administrative problems in exhibiting were observed, causing a waste to funds and effort.

1. *Administration.* Problems arising from the lack of assignment of authority and responsibility for exhibit supervision were often noted. This was especially true where exhibit management was a part-time job. The result of careless administration was that "everyone's job became no one's job" and no one "took hold" of the exhibit operation. As a result, it drifted aimlessly without adequate objectives, planning, control, or result evaluation. In such cases booth operations, displays, and manning were often poor in quality and results.

Such problems could have been lessened by assigning the responsibilities for exhibiting to one man long enough to enable him to develop skill in exhibit operations. By holding him accountable, and regularly reviewing his performance, a better degree of control of exhibiting operations could be achieved.

2. *Planning.* Adequate planning of exhibit displays, manning schedules, sales strategies, and various aspects of booth operation were noted often to be lacking. In several cases companies spent as much as $5,000 on a single exhibit effort with scarcely an hour spent on planning. As the marketing vice president of one decentralized company with several autonomous divisions, each of which carried on exhibit operations, put it, "I'm sure that some of our division exhibit men purchase $4,000 or



$5,000 displays in less time and with less thought than when they buy a good shirt for themselves". Without exception, where better than average results were achieved detailed planning was evidenced. Without sufficient planning exhibiting frequently becomes a separate event that is not integrated in the company's over-all promotional program.

3. *Booth Manning.* Many booth manning problems were observed. They included the following: not enough men to handle booth visitors and inquiries; more men than were needed; unqualified representatives who could not answer visitor inquiries; overtired men; and unenthusiastic, ill-mannered, "I-dare-you-to-come-into-this-booth-and-ask-me-a-question" types. Careful selection of the best men available would help insure that a company puts its best foot forward. Adhering to sensible written booth duty schedules would help even out the work load and guard against men becoming overtired. Review of past exhibiting experience would help serve as a guide to the number of men needed and at what hours they were required. Adequate training and indoctrination in booth sales strategies would help maximize the results of exhibiting.

Similar to most other exhibiting problems, booth manning snafus resulted primarily from inadequate and careless planning.

4. *Exhibiting Skills.* Few exhibitors were adequately competent in exhibit operations. The primary cause for this was a lack of skills and knowledge in exhibit techniques. Basic abilities in booth planning, designing, installation, operation and dismantling, were often neglected because of indifference. Such skills are not difficult to learn, but their absence was observed frequently to cause a loss of impact and sales opportunity.

5. *Cost Control.* Few executives interviewed knew what exhibiting actually cost them. Lack of records owing to the non-segregation of exhibiting costs from general accounts or simply carelessness, made exhibit cost control difficult or impossible. The decision as to whether or not to use a trade show exhibit as a promotional device is a question of comparing effectiveness and cost with that of other media. Although information on effectiveness may be difficult to come by, there is little excuse for not having cost information available.

6. *Evaluation of Results.* Evaluation of the success of a company in reaching predetermined objectives was lacking all too often. Only by striving for improvement over past results can progress be made. If a company does not evaluate its success against the benchmarks it has established in previous efforts, it does not know whether it is becoming more or less efficient. It is necessary to keep adequate records of the number and type of booth contacts and other results where possible if factual comparison of the effectiveness of exhibits with alternative promotional methods is to be made.

5. CONCLUSIONS ON EXHIBIT EFFECTIVENESS

The results of the research suggest the following significant conclusions on the value and effectiveness of exhibits as a promotional tool:

1. *Exhibiting is a more effective promotional medium when demonstration of a product is important.* This point may be illustrated by contrasting the experiences of a packaging company and a machinery company. The packaging company exhibited primarily boxes. The problem of creating attractive displays had stumped executives. They had more or less abandoned the problem as hopeless and this thinking apparently affected their entire exhibit operation. On the other hand, the products of the machinery company lent themselves more readily to the use of interesting demonstrations. The opportunity to have factory trained personnel demonstrate a product under desirable conditions was used to good advantage. The inherent demonstrability of its products was an important factor in the attraction of crowds to the booths of this company, and in the wide-spread interest in its exhibits and products.

2. *Shows are more useful for displaying large, unwieldy, or complicated products that either cannot be shown at all, or cannot be shown to best advantage under ordinary circumstances such as a regular sales call, than they are for small, simple products than can be conveniently carried and shown to a prospect in his office.* Examples of such products are large and heavy pieces of industrial machinery or large and extremely complicated installations of electronic equipment that require several highly skilled engineers for demonstration and explanation. On the other hand, the executives of companies which produce simple, standard products that can be easily sampled in small amounts, generally consider shows to be comparatively unimportant. Such products are frequently component parts or materials such as bulk chocolate, paper products, lubricants, primary metals, and adhesives.

3. *The value of exhibiting varies directly with the interest and ability of the booth personnel contacting the visitors present.* Next to a company's products, the quality of booth manning personnel is the most important single determinant of exhibiting success. Ineffective booth manning was almost invariably an important factor in exhibiting failures. Low quality booth manning arises from a lack of planning, organization, scheduling of booth duty time, booth sales strategy indoctrination, interest, and positive attitudes. The competent handling of these booth manning problems was perhaps the most important single cause of exhibiting successes.

4. *Exhibiting success varies directly with the degree of impact of the booth display on the audience.* Except for booth manning personnel, the booth display is the most important factor in impressing visitors with the sales message of an exhibit. "Homemade looking", amateurishly designed

and constructed displays seldom equal the visitor-drawing attractiveness and eye-pleasing interest of a display that is professionally planned, designed, and built. Lack of visitor interest was noted in many booths that lacked adequate displays. Like the circus barker, the booth display has the strategic job of interesting and drawing the passing crowd.

5. *The importance of exhibiting declines relatively as the effectiveness and coverage of personal selling increases.* Exhibiting has a relatively greater value for companies that have not achieved adequate sales coverage of markets. It enables them to contact many prospects that would not otherwise have been reached. In some cases, lack of direct sales coverage of markets is the most important reason for continuing to exhibit whereas, in other cases, thorough coverage of markets renders exhibiting unnecessary. The sales managers of large roller bearing and primary plastics manufacturing companies told of the importance that industrial trade show exhibits had for a beginning period of four or five years when their sales forces were inadequate in both quantity and quality. They both reported that the value of exhibits as a promotional tool became much less as their distribution channels and sales forces were built up and improved, and adequate market coverage was achieved.

6. *The promotional value of exhibiting declines relatively as the degree of familiarity with, and awareness and knowledge of a product increases.* Many executives, such as those of the roller bearing and primary plastics companies mentioned above, tell of a serious decline in the enthusiastic interest that was accorded their products when they had the appeal of newness. Trade show visitors are interested primarily in "What's new?". Their interest tends to decline as a product and its applications become more commonplace.

7. *The potential value of an industrial trade show to an exhibitor depends on its value to its industry and audience.* The worth of the promotional opportunity offered by a show depends on its importance as an industry event and its power to draw a large number of the right type of interested industry personnel. "Markets make media", and unless a desired market is attracted to a show for reasons of legitimate interest in the exhibits, promotional expenses and efforts will be largely wasted. Exhibitors report that an unbusinesslike, "holiday" atmosphere, absence of many good prospects, and low level of visitor interest makes shows almost valueless. On the other hand, large audiences, high visitor interest, and a businesslike atmosphere are primary factors in making exhibiting worthwhile.

8. *The potential sales value of exhibiting in an industrial trade show depends on customer buying habits or purchasing procedures.* The value of exhibiting is less if purchasing is done without an investigation which includes the review of products at a trade show. The cases of manufacturers of large pieces of custom engineered machinery whose prospects were generally unfamiliar with the equipment available and who visited

shows to request bids, illustrated the vital sales promotion benefits of exhibiting in industries where such a purchasing pattern exists. Many other cases show that exhibiting is fruitless as a sales promotion tool when purchasing procedures do not include a review of products at a trade show.

9. *The quality and success of a company's exhibiting effort vary directly with the skill of administering the exhibit operation.* Exhibit quality is higher where a competent man is assigned the authority and responsibility for directing an exhibit operation over a long enough period to allow him to develop a degree of know-how and capacity for the work. On the other hand, in the cases of several of the most unsatisfactory exhibit efforts observed, responsibility and authority were divided among so many people that no one considered the responsibility his. Consequently no one went to the trouble of developing more than a low level of exhibiting skill.

10. *The quality and success of a company's exhibiting efforts tend to vary with top management attitudes to exhibiting.* Top management attitudes, whether of enthusiasm and a desire to do the best possible job or of skepticism and disinterest, are reflected in the quality of exhibit planning and operation. In several cases, it was noted that the negative attitudes of top management toward exhibiting seeped down through the entire marketing organization fostering a negative attitude toward exhibits. In several companies, this created an intangible barrier to the "all out" enthusiastic type of exhibit operations observed in several firms where top management gave strongly positive signals as to their interest in exhibits and their belief that real benefits could be reaped from a first-rate effort.

11. *If the frequency of purchase and customer contact is high, the potential exhibiting value decreases relatively.* When continuous week-to-week or month-to-month purchasing contact is maintained with customers or prospects, the value of exhibiting is relatively less. In several cases where regular sales contacts were maintained, exhibiting was observed to offer almost nothing in the way of incremental sales promotion benefits.

12. *Industrial trade show exhibiting is more valuable to companies in industries where the rate of innovation — product development and technological change — is high.* If product development is slow or lacking, exhibitors have little that is new to show, whereas if there is a rapid rate of product improvement, companies are able to present more interesting displays and visitor attention tends to increase. This hypothesis is based on the findings that industrial trade show visitors are primarily interested in "What's new?". Exhibitors in the basic metal and food industries, for example, where old products never change and new ones are few and far between, encountered serious difficulties in

designing attractive displays. On the other hand, firms in fast developing industries such as electronics and chemicals, have comparatively little difficulty in creating crowd drawing booth displays.

13. *Definition of objectives and tough-minded evaluation of results is necessary to conscious, intelligent, and continuing exhibit success and improvement.* One of the chief spurs to increased exhibiting effectiveness is the practice of carefully evaluating results. Unless conscious efforts are made to surpass past achievements, as judged by tangible benchmarks, planned improvement is usually lacking. In companies where outstanding results are being achieved, objectives are crystallized, plans are laid down and followed, and an attempt is made to measure results. Without this kind of a methodical exhibit operational pattern, there is no plan to follow, no objective to reach, and no yardstick against which to gauge success or failure. The absence of a consciously intelligent approach to exhibits often results in unsuccessful and wasteful exhibit operations.

14. *The value of large-scale trade show entertaining is much less than is commonly believed.* Except possibly for small scale personalized entertaining that had a real business value to both the exhibitor and his guest, results did not justify entertainment expenditures. Several exhibitors studied, which did little entertaining, did not apparently suffer competitively. Believed by many to be the greatest waste connected with exhibiting, lavish entertainment has done little but to give the industry an odious reputation for staging "drunken brawls". It is an unnecessary appendage without which the industry would be better off.

15. *The cost of exhibit contacts is only a fraction of the cost of regular personal sales calls, but several times more than direct mail or other advertising impressions.* Trade show contact costs were found to range roughly from 41 cents to about $3 or more. This is judged to be much less than regular sales contacts which range in cost from $5 to $50 or more. The cost of direct mail and trade journal advertising impressions ranges downward from roughly 25 cents per impression.

"Gearing Industry for the Future"

The future offers a tremendous opportunity, but it offers an opportunity both for success and failure. Of all the freedoms in America, one of the greatest freedoms is our freedom to fail, our freedom to take a chance. There is not that same freedom everywhere . . .

The factor of obsolescence, has always been important in facilities, in equipment, and in progress. Today this factor must be recognized in connection with management. Our future success in business and industry definitely demands the complete discarding of obsolete thinking in management.

—Ray R. Eppert, Vice-President to The Burroughs Corporation, National Consumer Credit Conference, 1956: University of Michigan Business Paper, 32.

talking to your employees

Communications Within A Department

Paul M. Roddick

Do you know what your employees are thinking? Do you know what they say about their work, about the company, about you when they get together in the lunch hour? Make no mistake; employees do talk about their work and about their supervisors. Keeping abreast of and guiding the attitudes of subordinates is a fundamental supervisory responsibility, and not one that is easily met. It has to be worked at.

Of course, communication is a two-way street. We might ask whether your employees know what you are thinking. Are you quite frank in your criticism and your praise? Do you keep them informed of what's going on? Do you cut them in on your plans for the future at the earliest opportunity? When they ask you a question, do you give them a straight answer? The everlasting cry of "Nobody ever tells me anything" (you've said the same thing yourself on occasion) usually has some foundation. Is there something you *can do about it?*

Here Paul Roddick does not concern himself with the supervisor's responsibility for giving orders and assignments, although these, too, can often be improved. His primary interest is that area of communication which is entirely dependent upon the initiative of the supervisor. If it doesn't happen, the operations of the department are not at stake . . . only its efficiency.

IN general, there are two ways in which a supervisor may talk to his people, as individuals, or in a group. Each has its place in the oral communications structure, and neither should be neglected.

Probably the most valuable, and most neglected medium of communication is the staff conference or meeting. The term 'staff conference' carries certain overtones of black umbrellas and bowler hats, because, in practice, most such conferences are limited to higher levels of an organization. They shouldn't be. Many of the stresses and strains which develop within the work group, and between the group and the supervisor, could be nipped in the bud if provision were made for regular unrestricted and uninhibited discussion between the supervisor and all department personnel on matters of interest and concern to the whole group.

Some supervisors do call staff meetings — in a crisis, or to make some world-shaking announcement. They use the conference room the way their great aunt used the parlour . . . for weddings and funerals only. Both attitudes are Victorian.

All You Need is a Conference

There are two stock answers which supervisors give for not holding regular meetings with their staff. First, "I'm the boss. If I start asking my employees for suggestions, or give them the opportunity to sound off, first thing I know they'll be running the department instead of me." Second, "Now where am I going to find a room big enough or quiet enough to call a conference? There just isn't any place I can get all my people together."

Let's take these two problems one at a time.

In general, there are two real reasons why supervisors shy away from the advice and suggestions of colleagues or subordinates. Either they lack sufficient confidence in their own ability to stack their ideas up against those of others, or a carefully concealed basic insecurity makes them fear loss of prestige and authority in seeking the advice and co-operation of subordinates. As one supervisor recently expressed it to me: "*I'm* paid to run this department. Why should I let my employees make my decisions for me?"

Like so many others, he confused asking for advice with allowing others to make his decisions for him. It should be obvious to everyone that the higher one rises in the supervisory heirarchy, the more one depends upon the advice of others. The President of any large organization spends most of every day listening to the advice and recommendation of others, yet few would question the claim that he still retains the power of decision over matters which warrant his authority. He is indeed a large

toad in a very small puddle who doesn't need advice from someone, and who does not benefit from it.

Problems of space and quiet, especially for supervisors in plant surroundings, are more genuine. There may, in fact, be many plants in which a supervisor would have to show considerable ingenuity in order to get his people together where they could hear and be heard. However, physical problems are seldom insurmountable when the supervisor believes in the value of the meeting. In offices there are few supervisors who cannot improvise accommodation, or obtain access to a conference room, with little difficulty.

Getting Staff Meetings Off the Ground

How often should the supervisor call his staff together? No single answer will suffice. It has been suggested that the 'crisis' principle is inadequate. On the other hand, many supervisors who have been prepared to give staff meetings an honest try found that they fizzled out after a few weeks. In the beginning lack of participation is to be expected and guarded against. A staff conference is something like a courtship. In its initial stages people may feel a little strange towards one another. In the beginning (as in a courtship) it is important to have a firm agenda.

Before we consider various possibilities for an agenda, a word about the frequency and length of meetings. Once a week may be too frequent, particularly for beginners. At the start it is advisable to meet less frequently and to ensure that all who attend go away with a real feeling of accomplishment. Don't be too rigid in determining how long your meeting is going to last. Don't attempt to stretch it out after it has served its purpose, or cut it off in the middle of a heated discussion. Probably most staff conferences, to be effective, should last at least thirty minutes and not exceed an hour.

Conference material may be roughly divided into two groups: that concerned with the work of the department which we shall label 'Tech-

nical', and that concerned with the relationship of the employees to one another, to the supervisor, and to the company, which we shall call 'Administrative'. Both have a place on the agenda of staff meetings, and sometimes the two are inextricably interwoven.

Because people need confidence in one another and in their supervisor before their speech will honestly reflect their feelings, and because this mutual confidence and respect cannot be developed overnight, the subject matter of the first few conferences should be heavily technical. As a supervisor you may wish to talk about some aspect of the groups' work, or better still, ask members of your group to talk about their assignments. In general, discussion of technical matters should be designed to inform all members of the group what each person is doing, and should encourage an exchange of opinions on these matters between individuals. The meeting can also serve a useful training function if the supervisor will ask individuals to investigate some new method, process or machine, and report their findings.

On the administrative side, in these initial sessions, probably most communications will originate with the supervisor. As much as possible they should be positive and mild rather than negative and harsh. The unvarnished truth, should wait until a measure of mutual confidence and trust have been established, and until both parties are familiar with the new procedure. As time goes on, more and more 'administrative' problems will be raised spontaneously by employees. That, as emphasized at the beginning, is the purpose of the meetings, to encourage employees to *say* what they're *thinking*.

Between meetings the supervisor should keep an 'open' agenda—in other words, have employees let him know what items they would like to bring up at the next conference. Matters which are of general concern to the group can be included on the agenda; those of a more personal nature can be side-tracked by the supervisor for discussion with the individual or individuals concerned.

Person to Person

Not everything can or should be handled in group discussion. The staff conference has been stressed because progressive administrators have found it a very useful device, and because it has been generally neglected. Person-to-person talks between supervisor and employee occur in all departments of any organization, but seldom in any planned or systematized fashion. They cannot be a wholly effective method of communication unless they take place regularly and provide occasion for a frank and honest exchange of opinion.

Many supervisors would accept the desirability of a performance review with each of their employees at least once and perhaps twice a year. In practice, for a variety of reasons, these appraisals do not occur

as frequently as they should. Human nature being what it is, many supervisors will avoid this somewhat difficult task unless it is an established procedure (as it is in the Federal Civil Service).

There are many reasons for this calculated neglect. Where a dozen or more employees are concerned ,the review becomes a time-consuming task. Perhaps more important though, performance reviews often get down to brass tacks on both sides, and many supervisors prefer to avoid such soul-searching sessions. But they are important and should not be avoided. They are, in fact, the basic foundations of the day to day relationship which develops between the supervisor and his subordinates.

Every employee has a right and a need to know how he is doing, what parts of his performance are adequate and commendable, and what parts would benefit by improvement. You, the supervisor, are the person who judges the results of his work. How can he improve himself if you fail to pass on your appraisal?

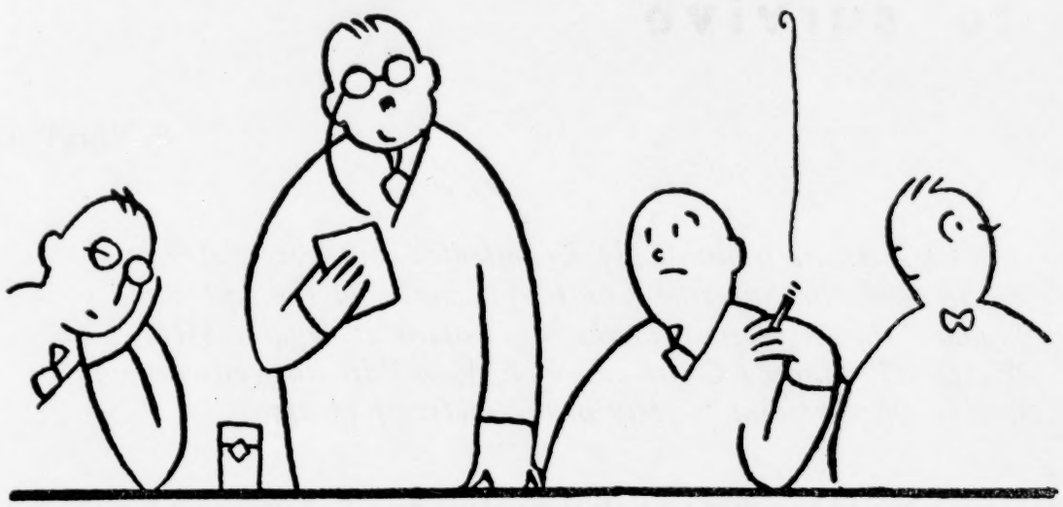
The competent supervisor is not frightened off the appraisal or merit rating interview by the knowledge that some plain truths will have to be spoken. Handled properly, such interviews remove many causes of strain which have little basis in reality, and re-establish good relationships on foundations of mutual respect. Not only will such an interview provide the opportunity to set up a programme of self-improvement for the employee; it will also turn out many misconceptions which he may have had about you and your responsibilities.

Be a Good Listener

There are certain problems connected with appraisal interviews of which the supervisor should be aware. The first and most important is a recognition of the personality differences in his subordinates, and a planned approach to the interview which takes these into account. For example, before you begin to interview, think carefully about the 'level of aspiration' of the person concerned. His reaction to your appraisal will be strongly conditioned by his belief in his own abilities and his hopes for the future. Your job is not merely to communicate the man's faults to him, but to evaluate his work in such a way as to preserve his self respect and motivate him to do something about his weaknesses. Telling him where he goes wrong won't begin to meet the problem. He must leave the interview convinced of his need to improve, and with the intention of doing so.

In your discussion of ratings with the employee, always seek to find correctable causes for inadequate performance, and to establish a mutually satisfactory improvement programme for eliminating faults and strengthening weaknesses. The whole emphasis must be positive rather than negative; if it is not, the appraisal interview must be classed as a failure.

Finally, be a listener, and a good one. This is one of the toughest jobs most of us are called upon to perform. It might appear on the surface to have no place in an appraisal interview where you are supposed to be *telling* the employee how he stands. However, if you can get the employee to rate himself first, he may be far more candid about his weaknesses than you would dare to be.



Conclusion

Don't underestimate the vital importance of your own departmental communications programme. There is no surer way down the slippery slopes of supervision than to lose touch with those upon whose efficiency and continued cooperation the well-being of your department depends. Don't let communication happen. Too often it won't. Plan it so that it will accomplish your objectives and meet your needs.

"Ground Rent - Not Taxes"

Canadians will no doubt hear from Social Creditors that this election year is the sixtieth anniversary of the death of 19th century economist Henry George. In the U.S.A. a 90-year-old American businessman has brought up-to-date his famed single-tax theory in "Ground Rent, *Not* Taxes: The Natural Source of Revenue for the Government".

John C. Lincoln, now of Phoenix, Arizona, founder and honorary board chairman of the Lincoln Electric Company of Cleveland, Ohio, writes "the community, and not the landowner, has the right to collect ground rent and use it to pay community expenses". This, he asserts, would remove the need for taxation of wealth ("material things produced by labour from land to satisfy human desires") and would lead to a semi-Utopian state in which there would be more jobs than men. This prescription for inflation is uncommonly like present-day Canada, even outside Alberta.

Canadian
FARMERS MUST COOPERATE
to survive

F. Von Pilis

Farmers are traditionally discontented, but were elated by the decision of the Supreme Court of Canada in the last week of January that Ontario's marketing system is legal. Here The Western Producer's Co-op editor, F. Von Pilis, suggests his solution to their present poverty in the midst of plenty.

TOM KENNEDY likes to tell of his first trip to town as a youth with a load of wheat which he was to sell at the local elevator. Tom watched the miller take a sample, test it and announce what he would pay. He had the choice of accepting the miller's offer or taking his grain home again. When he took the money and turned around to buy some feed for his cattle, again he was told what the price was and had to pay it.

Riding home behind the old team, Tom Kennedy fell to musing about this strange state of affairs which did not permit the farmer any say in setting the price of what he had to sell or wanted to buy, and he decided to do something about it. Tom Kennedy grew up and became minister of agriculture of Ontario. He did a lot of things to strengthen the position of the farmer in the market place.

The history of producer controlled orderly marketing of farm products in Ontario goes back to the first voluntary association of asparagus growers early in the century, long before Tom Kennedy tackled the task of freeing farmers from the dictates of trade and industry. In the prairies, farmers were revolting against exploitation by railway and elevator companies, and started their own grain companies. They fought an uphill battle until the Sintaluta case proved their rights and put the co-operative movement on a solid basis attracting more and more of the wheat growers in the West. (At Sintaluta a C.P.R. agent had broken the law by denying farmers the needed boxcars. The farmers took the case to court and won.) In the Maritimes, a group of men centered

about St. Francis Xavier University had come to the conclusion that farmers and fishermen needed education and guidance to become "masters of their destiny". Out of their efforts grew the now world-famous Antigonish Movement.

The Cry for Orderly Marketing

Since those early attempts of farmers, under the leadership of men like Dr. M. M. Coady in Nova Scotia, J. J. Morrison in Ontario, and E. A. Partridge in Saskatchewan, to bring order into the marketing of their products and to gain some measure of control over their prices, the idea of collective bargaining and centralized marketing has taken root and is spreading in the country between the rugged shores of Cape Breton Island and the sunny valleys of British Columbia. If it has not been completely accepted yet by Canada's farmers, it is largely due to the organized propaganda carried on by vested interests through many media of mass communication such as "journals of opinion" distributed freely and without charge to the press, radio, and community leaders.

For years, farmers have been bombarded with romantic slogans of "rugged individualism", "independence" or "farming is not a business but a way of life." They were told to till their land and leave the marketing of the product of their toil to the "experts", viz. The Trade.

The trade, carried on not by humanitarians, but by profit-seeking businessmen, had no interest in the returns to the farmer, as was so lucidly explained to the House of Commons prices committee in 1948 by the late president of Canada Packers, J. S. McLean, who said that "we buy as cheaply as we can and we sell our meat for as much as we can get for it . . . I will get all the market will justify me getting." On another occasion Mr. McLean testified: "The total livestock is sold for the total sum whatever it is. From that sum is deducted the packer's expense and the packer's profit, and the farmer gets the balance."

Efficiency and Redundancy

Farmers had a rude awakening lately when the tune changed from the pleasing note of "the family farm is the foundation of our society" to a cry of "efficiency". It came as a shock, protested in many meetings, that spokesmen for government sponsored institutions such as the Ontario Agricultural College at Guelph are now proposing to encourage "low-income" farmers to leave agriculture.

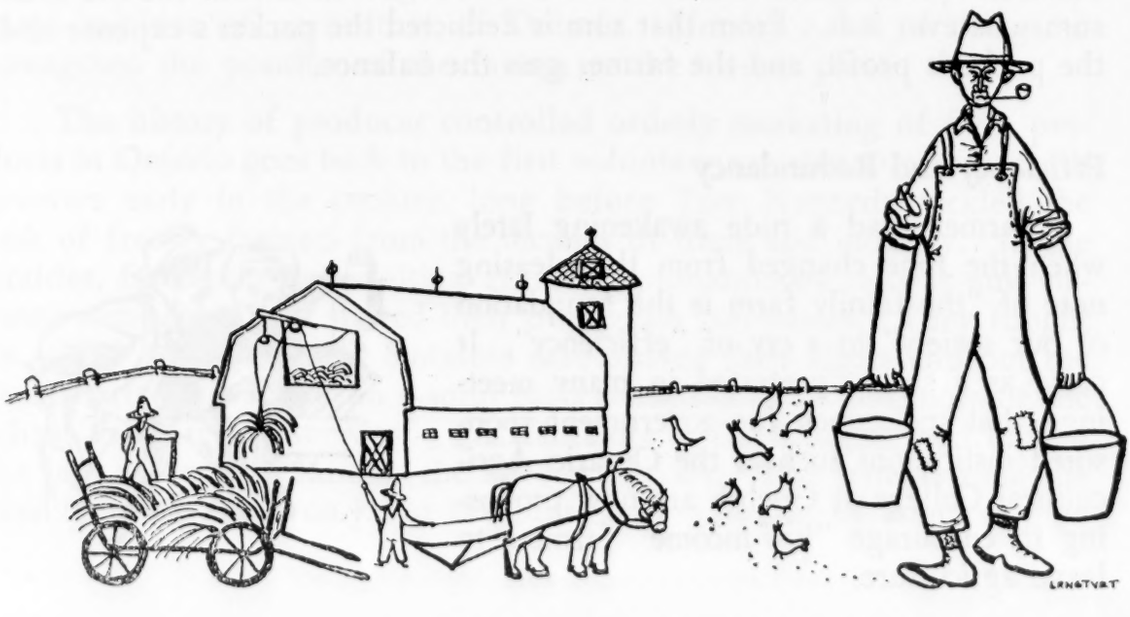
Another question, whether farm organizations should be democratic and act in the interest of the majority of small-scale farmers, or for the benefit of the few "efficient operators", must have caused bewilderment in the mind of many a "low-income" farmer.

Leaders are springing up who feel that the farmer is entitled to more than just the leftovers after the expenses and quite considerable profits of the packing industry, and men like C. W. McInnis, president of the Ontario Hog Producers Co-operative, and A. V. Cormack, president of the Ontario Farmers Union, are roaming the country exhorting farmers to get together for co-operative action.

The Need for Countervailing Power

The need for co-operation was never greater. The economic helplessness of the farmer has been highlighted by J. K. Galbraith, Elgin County farm boy of Harvard University fame, in his book "American Capitalism" who thinks the individual farmer's marketing power "in the typical case" is nil. If he withdraws from the market, it will not affect prices and have no consequence for anyone but himself and his family. It is necessary to emphasize the words "in the typical case". It is the great majority of farmers producing milk, cream, hogs, cattle, poultry, fruit, vegetables and other mass consumed commodities who are primarily concerned about present trends.

The breeder of record-breaking milch cows or prize-winning horses will generally be in a position to set his own price. So will the farmer who, for one reason or another, can plant his potatoes and cabbages a little earlier than his neighbour and be first on the market. But there can be only one first. The 'also ran" will have to accept what a small



number of buyers decide to pay to a large number of sellers. To balance the market power of the buyers, often concentrated in a few large corporations, the farmers have no alternative but to band together, with or without the government as a partner, for collective bargaining and centralized marketing. No other choice but the open market has been offered them by our professional economists, political or otherwise, who are still living in the olden days of Adam Smith, Jeremy Bentham, and David Ricardo, and are wistfully dreaming of "convertibility" of currencies instead of devoting their waking hours to the search for new methods to facilitate the exchange of goods.

The farmer who produces to fill the everyday needs of his family has no illusions about accumulating large bank accounts, but wants to convert his products into manufactured goods for the improvement of his farming operation while his wife hankers after a new cookstove or an electric waterpump for the home. Whether this exchange of goods is carried on on the basis of dollar or sterling, by barter or by by-lateral and multi-lateral trade agreements or via clearing accounts, is of no concern to the farmer who thinks in terms of needs of people and not of profits as an end in themselves. To provide opportunities of trading and the legal basis of doing it collectively, is the responsibility of governments, national and provincial.

Against the Overgrown Industrial Infant

At no time did farmers get the protection and support of government to the extent industry and commerce did. Cradled by protective tariffs, the puling infant of industry has now grown into Moloch ready to devour those who nurtured him with their sweat. Even during the depression years of the thirties, Canada's governments chose to shelter the country's industry behind high tariff walls, abandoning the farmers in an open world market where they could not get rid of their products at fire-sale prices, because most other countries retaliated by closing their borders to foreign imports. The theory that lower prices would move more wheat has been amply disproved.

Yet, 25 years later, bankers, economists and trade experts have conveniently forgotten those days and advise farmers to give up their marketing boards and agencies, to lower their prices in accordance with the "law" of supply and demand, and to compete with the give-away programmes of the United States government. Forgotten are the wartime promises of the federal government, given to the farmers who were forced to sell their wheat at half the world price, that they would receive "adequate and stable returns". Forgotten is the purpose of the Agricultural Prices Support Act which was to "secure a fair relationship between the returns from agriculture and those from other occupations".

The agricultural prices support fund, set up in March 1946 and endowed with $200,000,000 to be replenished annually, has been tapped, up to March 31, 1956, to the extent of $89,196,061. Of this amount, seventy million dollars were spent to alleviate the adverse consequences of the foot and mouth disease outbreak in 1952 which, through rather indifferent handling by the federal department of agriculture, threatened to develop into a national catastrophe. In other words, out of a potential two thousand million dollars less than twenty million were used in ten years for the support of farm products prices.

This is little help indeed, especially if it is compared with the $60,000,000 Canadian taxpayers contribute annually to the unemployment insurance fund or the $15,000,000 paid out by the Treasury to make gold mining profitable, and certainly not enough to keep Canada's basic industry from going on the rocks.

The Illusion of Government Help

Any hopes farmers might still have held for help and assistance from the federal government were crushed by Finance Minister Walter Harris at the annual convention of the Ontario Federation of Agriculture when he came out against farm price supports. He was heartily applauded for his "courage" by the watchdog of the fleshpots of industry and finance, The Financial Post, which wants "none of that wasteful nonsense in Canada".

The result of federal farm policy is a decline of farm prices by 15.3 percent over the last five years. In the same period prices of commodities and services used by farmers increased by 14.9 percent. Food prices at the consumer level, incidentally, also went up by 6.3 percent.

Group Action Basic to Society

Caught in the cost-price vice and foresaken by their government in the ring of the open market, Canada's farmers have no choice but mutual self-help through co-operative action. But, co-operative action by farmers, so feeble compared to collectivized labour, management, bankers, lawyers or doctors, has been stamped as intrinsically evil by the propaganda experts. They ignore the fact that group action was the guiding principle of western society until it reached the "post-Christian era", cast off traditional religious teaching in its public institutions and legislation, and brought the whole process of production as well as trade in every kind of goods "almost entirely under the power of a few, so that a very few rich and exceedingly rich men have laid a yoke almost of slavery on the unnumbered masses of non-owning workers," as Pope Leo XIII so bluntly wrote in his encyclical letter "On the Condition of the Worker".

Forty years later, Pius XI again scored the "immense power and despotic economic domination . . . concentrated in the hands of a few." Both Popes were acclaimed for their forthright stand by the late Archbishop of Canterbury, William Temple.

Farmers who do not want to join the unnumbered masses of non-owning workers and wish to be free from despotic economic domination, may well follow the advice of Thomas Aquinas, who comes to the conclusion that the exchange of commodities "in order to satisfy the needs of life . . . does not belong to tradesmen, but rather to housekeepers or civil servants who have to provide the household or the state with the necessaries of life." A strong argument for co-operatives and public enterprise, made by a saint.

Tom Kennedy may not have bothered with St. Thomas, but when he grew into "Old Man Ontario" he put legislation on the books of the province designed to give farmers the legal framework in which to organize for the exchange of commodities in order to provide their household with the necessaries of life. At times, when he slowed down in his efforts, he was given new impetus by the opposition under the leadership of sharp-spoken E. B. Jolliffe, Q.C.

The Ontario Farm Products Marketing Act

The Ontario Farm Products Act, most comprehensive marketing legislation in Canada, provides for the establishment of producer local boards which are empowered, with certain limitations, to regulate and control the marketing of farm products within the province. At the time of writing the Act is still under consideration by the Supreme Court of Canada as to its validity. Farmers have been promised and expect new legislation if and when the need arises.

Drafting the Act, considerable care has been taken to define the specific powers which may be delegated to producer boards and the powers to be administered through regulations by the Farm Products Marketing Board.

The Act offers any producers' commodity group a choice of two forms of organization in developing a marketing plan for any farm product: (1) by group or collective bargaining machinery, provided for in section 3 of the Act; or (2) by a marketing agency or single sales agency corporation under section 7.

For collective bargaining a negotiating committee of equal numbers of producers and buyers is set up. This committee negotiates producer prices and terms and conditions of purchase and sale for each year. Any agreement has to be reported to the Farm Products Marketing Board and upon approval by the Board is binding on both sides.

If an agreement cannot be reached by a negotiating committee, the case is submitted for arbitration to a three-man board. Each party appoints one member. If they cannot agree on a chairman, he is appointed by the Farm Products Marketing Board.

The authority of these marketing schemes is limited to the first sale of the regulated product from the producer to the buyer.

The Act also provides that the Farm Products Marketing Board may designate a private or co-operative corporation recommended by a local board administering a marketing scheme as its marketing agency.

Regulations approved by the Board may confer wide powers to an agency such as control and direction of the marketing of the regulated product including time and place at which it may be marketed, and grade and class that may be marketed by any producer. The agency may also have the power to fix the price that shall be paid to the producers. It will handle all the moneys received from the sale of the product and remit direct to the producer after deduction of the service charges as determined by the local board under which the marketing agency operates.

Orderly Marketing Overseas

The Ontario Act is largely patterned on the British Agricultural Marketing Acts of 1931 and 1933 which in turn derived from legislation developed in Queensland Australia.

Like its Australian and British models, the Ontario Act features the principle that a majority of producers of a commodity desiring to sell their product collectively may compel by law the minority to join in a common marketing program.

Confronted by the alternative of joining the ranks of a propertyless proletariat, rural or urban, farmers may prefer to hold on to their land individually to grow food to the limit of its capacity, and co-operate with their neighbours for the distribution of what they produce.

Canada's Farm Problem Is Everyone's Concern

Once farmers have established themselves as an economic force in the market, they can use their collective power to convince the federal government of the need for action in one of two ways:

Either to take down the windbreak of protective tariffs and expose Canadian industry to the fresh air of outside competition. This will enable farmers to trade (i.e. exchange their commodities for money or other commodities) in a world free to sell to Canada. If Canadian farmers are allowed to buy their footwear in Hongkong, their under-

wear in Britain, their shirts in Japan without having to pay prohibitive import duties, it will certainly help to sell our wheat, only commodity of which we have an appreciable surplus.

Or, should Canada's farmers be expected to continue their subsidization of Canadian industry by paying prices artificially inflated under the brooderstove of protective tariffs, they have every right to demand similar protection from cheap imports of food. In this case they will have no trouble fixing the prices of all their commodities at levels which will give them "adequate and stable returns."

As to wheat there is no cause for undue concern. Lately Canada was blessed with a series of extraordinarily abundant crops. Improved tillage methods and very favourable moisture conditions have increased average yield in the three prairie provinces over the past five years to 22.1 bushels per acre as compared with an average of 14.4 bushels per acre for the preceding 21 years. Large parts of these crops are piled up in the barns and on the fields because elevator and transportation facilities are obsolete.

Thanks to the efficiency of the Canadian Wheat Board, operating under the doughty Minister of Trade and Commerce, C. D. Howe, western farmers have marketed in the five years from 1951-52 to 1955-56 an average of 657,000,000 bushels of grain per crop year compared with an average of 458,000,000 bushels per crop year in the five years from 1945-46 to 1949-50. As a matter of fact, had it not been for these large crops, says the Board's Chairman, George McIvor, Canada could not have filled her commitments.

No doubt, in due course nature will restore its balance. Looking South, we may well fear the cancer of drought eating its way northward, and the day may not be far off when we will pray for the days of plenty.

If there is little reason to worry about full bins and granaries, there is still the trouble of empty pocketbooks in the Prairies. Not a surplus of wheat, but a shortage of cash is bothering the farmers in Western Canada, and its effects are felt by the farm implement and farm supply industry. The demands of farm organizations for cash advances by the federal treasury on farm stored grain are justified by the needs of the farmers and the consequences a prolonged agricultural depression may have for the entire economy.

Time and time again Canada's farmers have been told that the problems are not unsurmountable—given time and study. However, men who have fallen in water over their heads cannot wait until the lifeguards have taken time off for more study of methods of rescue. They must struggle to get out of the water and back on solid ground.

Farmers can do it by concerted co-operative action. The time is now before another federal election, not after.

Finally, let there be no mistake about it: The solution of Canada's farm problem is the nation's concern lest it loses its family farms, breeding ground of free yeomen and backbone of democracy.

What is the American Family?

A few years ago it was assumed that the number of working wives would decline steadily, following the second World War. However, these assumptions about women withdrawing from the labour force were made by men, and this just becomes one more illustration about how seldom men understand women.

In 1900, half a century ago—which isn't so long in term of social trends—6 per cent of married women held jobs outside their own homes. By 1940, with the stimulus of defence production, this percentage more than doubled and 15 per cent of married women had jobs outside their homes. After the war and after some decrease in the intensity of war production, in 1950, 25 per cent of married women continued to work outside their homes. The 1955 survey of consumer finances suggests that about 30 per cent of the spending units today include two or more income earners . . .

. . . The divorce rate was about five per cent of the number of marriages back in the 1880's, but before the turn of the century it began to rise and after the first World War it had doubled and ran about 10 per cent of the number of marriages. After the second World War it was higher than ever, but it was assumed that it would decline a good deal from the postwar peak. It has declined a little, but for the last few years the divorce rate has been running about 25 per cent of the number of marriages.

—*Robert B. Smock, National Consumer Credit Conference, 1956: University of Michigan Business Papers 32.*

Canada's CLOTHING INDUSTRY

William Lazer

This article is condensed from Dr. Lazer's doctoral dissertation on the major economic characteristics of Canada's garment industry. The first section consists of an analysis of the industry's market structure and includes an examination of the factors of supply and demand, the ease of exit from and entry into the industry, and the homogeneity of apparel manufactured. The final section briefly investigates ownership structures, economies of scale, physical plant requirements, industry stability, cooperation among manufacturers, and present industry status.

I. Market Structure

Supply Side

GARMENT manufacturing in Canada is an atomistic industry. It is composed of a large number of relatively small firms, none of them able to produce a volume large enough to affect prices by controlling production. In fact, in Canada as a whole in 1951, there were only 28 establishments making men's clothing and seven establishments making women's clothing which were large enough producers to employ 200 or more persons.[1] The 28 men's clothing establishments employed only 4.8% of the total number of persons in that segment of the garment industry and produced 33.8% of the total value of men's garments. The seven ladies' clothing establishments employed about 0.7% of the employees and made just 6.4% of the total value of ladies' garments. Furthermore, the Dominion Bureau of Statistics records that "in the case of women's factory clothing . . . and men's factory clothing, the degree of concentration is low."[2] The statistics contained in Table I show that 15.77% of the Canadian men's clothing industry establishments in 1951

[1]Canada, Dominion Bureau of Statistics, *General Review of the Manufacturing Industries of Canada—1952* (Ottawa, Ontario: Queen's Printer, 1954), p. 86.

[2]*Ibid.*, p. 79.

TABLE I—MEN'S AND WOMEN'S FACTORY CLOTHING MANUFACTURING ESTABLISHMENTS IN CANADA BY GROSS VALUE OF PRODUCTION FOR THE YEAR 1951[a].

Gross value of products	Men's factory clothing			Women's factory clothing		
	Establishments	Employees	Gross value of products	Establishments	Employees	Gross value of products
Under $25,000	57	186	$678,746	83	329	$1,122,734
25,000 to 49,999	34	222	1,278,026	99	820	3,918,784
50,000 to 99,999	96	1,129	7,001,251	169	2,216	12,550,810
100,000 to 199,999	107	2,292	16,074,461	237	3,361	33,841,910
200,000 to 499,999	156	6,706	50,260,182	238	10,049	74,351,705
500,000 to 999,999	75	6,442	51,953,322	65	5,966	41,775,961
1,000,000 and over	52	15,563	111,415,343	21	3,944	30,189,930
Head offices		192			3	
Totals	577	32,732	$238,661,331	912	28,688	$197,750,934

[a]Source: Canada, Dominion Bureau of Statistics, *General Review of the Manufacturing Industries of Canada—1952* (Ottawa, Ontario: Queen's Printer, 1954), p. 80.

had a gross value of production of less than $50,000, while the gross value of production of 32.40% of the establishments and 50.95% of them were under $100,000 and $200,000 respectively. In the manufacture of women's clothing, 19.96% of the establishments had a gross value of production of less than $50,000, and 34.49% and 64.47% of them realized a gross value of production of less than $100,000 and $200,000 respectively. These statistics as well as the remainder of the data in Table I emphasize the prevalence of small enterprises in the manufacture of garments in Canada, and illustrate the fact that large concerns do not control the supply of garments.

Besides being composed of small firms, the garment industry is characterized by fierce competition amongst manufacturers in both prices and services offered. It is an industry in which the individual manufacturers do not tend to cooperate in groups or associations, but rather consistently compete with each other in an effort to achieve individual success even for the short-run. The opinions and actions of wholesalers, retailers, and garment manufacturers and their salesmen verify this observation.

Demand Side

The demand side of the market for clothing manufactured in Canada is also a competitive one. The variety of outlets through which clothing is sold, and the volume of sales made by independent retailers enforce competition. In Canada in 1951, independent retail stores sold 61.4% of the men's and boys' clothing and 53.6% of the women's, misses and children's apparel.[3] With the major proportion of men's and women's garments sold by independent retailers, the demand confronting garment manufacturers is not controlled by one or a few retailers. In addition, garment producers also find a market in wholesale and industrial customers.

The importance of department store sales in the distribution of clothing is also brought out by census information. Department stores accounted for 26.3% of men's and boy's clothing and 33.0% of women's, misses', and children's clothing in 1951.[4] In addition, the garment manufacturers surveyed were of the unanimous opinion that three of the large department stores constitute a considerable portion of the demand side of their market. This is supported by the estimates received of department store sales in 1954.[5] It is estimated that the three largest

[3]Canada, Dominion Bureau of Statistics, *Census of Canada, 1951. Distribution, Retail Trade,* Vol. VII (Ottawa, Ontario: Queen's Printer, 1954), p. 26-1.

[4]Canada, Dominion Bureau of Statistics, *Census of Canada, 1951, loc. cit.*

[5]Mr. George Weightman, Comptroller of the Hudson's Bay Company Retail Store, Winnipeg, estimated that out of a total Canadian department store volume of $1,600,000,000, the T. Eaton Company Ltd. accounted for $550,000,000; the Robert H. Simpson Company (including Simpsons-Sear) accounted for $225,000,000; the Hudson's Bay Company accounted for $100,000,000; and Woodward's Ltd. accounted for $60,000,000.

department store chains did 82% of the total Canadian department store volume in 1954. Furthermore, one Canadian chain is reported to have made 51% of all department store sales. In addition, by virtue of their recognized leadership in the clothing field, the influence of the department stores may even be greater than that indicated by sales figures. Thus, it appears that the demand side of the market is less competitive than the supply side. The large department store chains are able to exert an influence on prices for clothing and have been known to put price squeezes on garment manufacturers. Nevertheless, the demand situation is not a monopsonistic or oligopsonistic one. In general, competition prevails since the garment manufacturers' demand is made up of a large number of buyers, no one of them large enough to control the market.

Entry and Exit

In line with the tenets of perfect competition is the ease of entry into and exit from garment manufacturing in order to adjust to the demand for merchandise. The fact that the initial capital outlay required by small-scale manufacturers is quite small, that equipment can be used quite efficiently on a modest scale of production, that the market for the lowest-priced staple articles is constantly available, and that technical competence is readily acquired makes virtually every cutter or operator in the industry a potential manufacturer. However, it is not only the new entrants into the field that lead to competition in the clothing items currently in demand. The ease of transferring resources of the same labour skills, machine uses, and even cloths from one type of clothing to another, as well as the flexibility in output through working overtime hours, enhance the possibility of entry and increase the degree of potential competition.

Homogeneity of Products

A corollary of the preceding statement is that, in general, Canadian clothing manufacturers do not have a monopoly position with respect to the products manufactured, either through branding policies or exclusive styles and processes. Similar merchandise made by competing firms usually has equal customer and consumer acceptance. Factory produced clothing is generally regarded as being fairly homogeneous despite the use of brand names. Clothing manufacturers on the whole have not built up the importance of brands in the minds of the consumer above some of the other considerations such as style, colour, cloth, and price.

It is an accepted practice in the trade to copy and to adapt styles from the creations of any manufacturer that take hold. Thus, the production of competing firms might be readily adjusted to meet the demands of the consumer, rather than being excluded by monopoly controls on popular styles.

As may be seen from the preceding discussion, the garment industry of Canada is composed of a large number of buyers and sellers, none of them large enough to control or to have a great effect on the market. Competition operates among buyers and sellers to a marked degree in order to determine prices. New clothing manufacturers as well as established concerns are capable of entering most segments of the industry quite easily, and of producing clothing that will receive definite customer acceptance. In addition, the prices paid by customers, sources of raw materials, the current best selling items, and other important market and trade information are far from being tightly held secrets in industry circles. These factors at least seem to illustrate an industry operating under conditions approaching those of the economist's concept of nearly perfect competition.

II. Other Economic Characteristics

Manufacturing as a Job

It is generally acknowledged that most manufacturers of clothing in Canada originally regarded their entry into the industry not as an alternative type of business investment, but rather considered it to be an opportunity of making a living. By becoming a manufacturer one was able to put into practice his skills or trade. Thus, people often became manufacturers by necessity, and not as the result of a logical investment choice. Consequently, the average owner of a clothing firm was, and still is, an owner-operator. He was primarily a technician who was production-oriented and inclined to believe that success was achieved by long hours of work, and skimping and saving in order to cut costs and thus be able to sell at a lower price. Some of this thinking is still

in evidence in Canada today. However, many of the present firms, while each is still owned and controlled by one or two families, are managed by people who have given up or never acquired trade skills, and are groping for the necessary management tools that will enable them to operate their companies efficiently.

Economies of Scale

Garment manufacturing is one industry in Canada in which some of the economies of scale resulting from the aspect of physical production appear at a level of relatively modest size. One manufacturer summed up the general consensus in a statement that "the most efficient unit is a combination of a husband who can cut and a wife and one or two friends who can sew". It is recognized that small-scale productive units can make efficient use of plant and machinery including special machines. Then, too, increased capacity is available in small unit increments with the addition of extra machines or by working on an overtime basis. Therefore, small firms are in a position to compete effectively with the larger companies in most production considerations.[6]

Ownership

Complementing the characteristic of small-scale productive efficiency is the fact that the clothing manufacturing concerns are family-owned. It was found that every company surveyed in the sample is owned and controlled by one or two families. The garment industry is not on industry of large, well-advertised corporations, managed by a board of directors who represent the interests of a large number of geographically-scattered shareholders. It was found that the garment manufacturing companies are, without exception, wholly-owned by shareholders in one or two families. Financing through the use of stocks and bonds sold on the money market is unknown. Ownership capital, profits that are plowed back into the business, and bank credit play an important part in company financing.

One-Plant Production

Canadian garment plants are largely self-contained units. The garments manufactured are designed, cut, sewn, and finished under one roof. Most manufacturers tend to perform all the manufacturing functions in their own plants with each plant set up to produce finished garments. Nevertheless, the practice of contracting production out to a production specialist is currently being employed by almost every segment of the industry.

[6]However, small-scale producers are often not as efficient in the performance of marketing, financing, or other business functions.

Low Rental Requirements

The physical facilities required by the industry are characterized as those of low rental cost. In essence, the average garment manufacturing concern is housed in "warehousing premises". The movement of wholesaling and warehousing concerns to the suburbs from the centre of Canadian cities has provided the needle trades with facilities well suited to their needs. In addition to a modest rental requirement, the amount of floor space required per machine is small. Hence, the over-all space cost per machine unit is somewhat insignificant relative to the situation of other manufacturing industries.

Stability

Although the garment industry of Canada has been described by one prominent manufacturer as including many "old and well-established firms", nevertheless, it is still an industry in which the turnover of companies is high. Another important manufacturer emphasized that "the life span of the average Canadian garment manufacturing plant is something less than seven years". While this statement cannot be verified statistically, the figures in Table II showing commercial failures under the proviions of *The Bankruptcy and Winding Up Acts,* indicate that the number of failures in the needle trade is high relative to other manufacturing areas. From 1949 on, the clothing industry has always ranked among the top four industries in the number of commercial failures under these Acts. Furthermore, in 1954, there were more failures in the clothing group than in any other category of manufacturing.

Cooperation

The constant flux of owners into and out of the industry leads to the formation of a group of manufacturers who often adopt a short-run point of view and disregard some of the important industry considerations. With new people constantly entering the industry, it is obviously harder to obtain industry cooperation that might benefit both the consumer and industry members.

Status

While the general position of the garment worker is quite low in status, it is not believed to be that of the lowest status. The industry is often referred to as the "rag industry" which has been developed by and for the foreign-born population. The employees do not have the same status equipment or symbols as many of the workers in other industries. It seems that operating a sewing machine, owning a pair of scissors, being an operator or cutter, does not lead to the same pride of

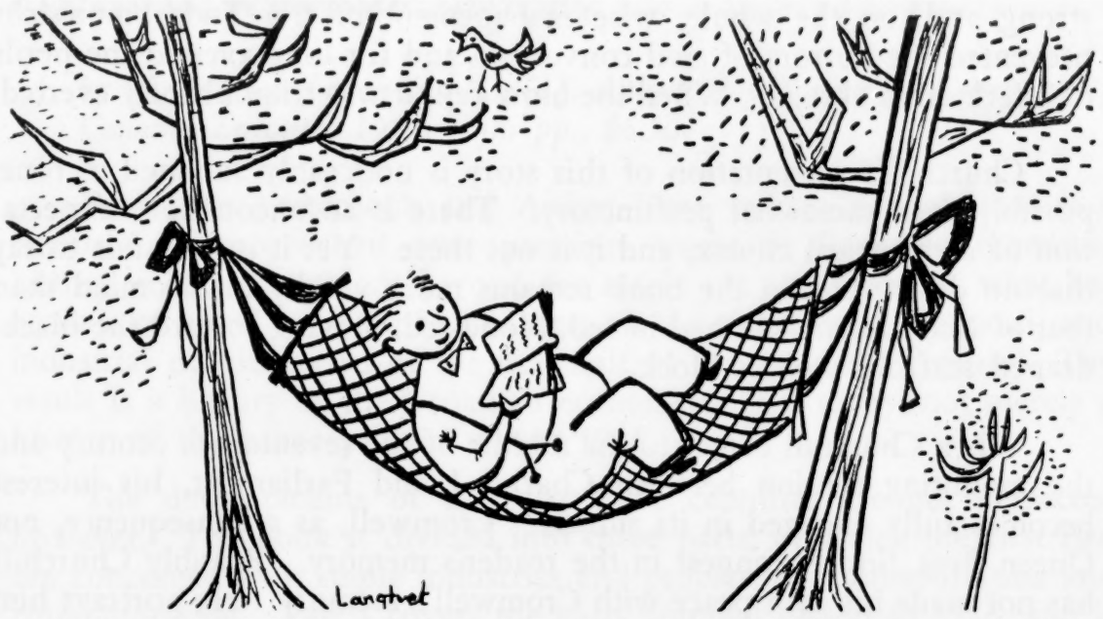
equipment and job as does the operation of larger machines, office equipment, or owning one's own tools.

TABLE II

COMMERCIAL FAILURES IN MANUFACTURING IN CANADA UNDER THE PROVISIONS OF THE BANKRUPTCY AND WINDING UP ACTS FOR THE YEARS 1949, 1952 AND 1954[a]

Manufacturer	1949 Failures		1952 Failures		1954 Failures	
	number	per cent of total	number	per cent of total	number	per cent of total
Clothing	28	12.02	49	16.07	61	14.66
Textiles	8	3.43	30	9.84	46	11.06
Vegetable foods	31	13.30	31	10.16	44	10.58
Drink and tobacco	3	1.29	2	.66	31	7.21
Animal foods	7	3.00	18	5.90	24	5.77
Fur and leather	34	14.59	24	7.87	31	7.45
Pulp and paper	9	3.86	24	7.87	29	6.97
Lumber and manufactures	46	19.74	37	12.13	56	13.46
Iron and Steel	15	6.44	17	5.57	19	4.57
Non-ferrous metals	7	3.00	17	5.57	19	4.57
Non-metallic minerals	8	3.43	9	2.95	12	2.88
Drugs and chemicals	12	5.15	9	2.95	6	1.44
Miscellaneous	27	11.59	44	14.43	56	13.46
Totals	233	100.00%	305	100.00%	416	100.00%

[a]Source: Canada, Dominion Bureau of Statistics, *Commercial Failures Under the Provisions of the Bankruptcy and Winding Up Acts, Fourth Quarter and Year 1949* (Ottawa, Ontario: King's Printer, 1950), and subsequent publications for the years 1952 and 1954.



BOOK REVIEWS

THE NEW WORLD

by Winston S. Churchill. A history of the English-Speaking Peoples. McClelland and Stewart Ltd., 1956. 433 pp., $6.50.

This second volume of Churchill's "History of English-Speaking Peoples" (*The Birth of Britain* was reviewed in the Summer issue, 1956) carries the story of English development through two hundred years from the beginning of Tudor rule in 1485 to the flight of James II in 1688. The canvas is now somewhat larger, for it includes Scotland and Ireland and extends to the eastern shore of North America, where "the local assemblies of the colonists were sturdily asserting traditional English rights against the interventions of the King's ministers from London". The centre of interest remains England, now increasingly aware of her own unity and destiny.

England in the sixteenth and seventeenth centuries endured two major crises, the Reformation and the Puritan Revolution. In his account of the first of these upheavals Churchill tells the story of the Tudors with his accustomed skill. Here is a coherent picture of England moving amid threatening disasters from uncertainty on the morrow of Bosworth Field to the burst of confidence in the closing years of Elizabeth I. The

strong and, on the whole, wise management of the Tudor monarchs prevented the horrors of civil convulsion and for long averted the perils of attack from abroad. When the blow fell, it was triumphantly averted.

Churchill's presentation of this story is noticeably subdued in tone, possibly even somewhat perfunctory. There is an unconscious expectation of a rhetorical climax, and it is not there. Yet it is only fair to say that no description in the book remains more vividly in the mind than that of Mary Stuart, clothed in red, blood-red, moving toward the black-draped scaffold and its block.

When Churchill comes to the middle of the seventeenth century and the mounting tension between Charles I and Parliament, his interest becomes fully engaged in its subject. Cromwell, as a consequence, not Queen Bess, lingers longest in the reader's memory. Possibly Churchill has not made his own peace with Cromwell's memory. He portrays him as a man who "with all his qualities as a soldier and a statesman, is in lasting discord with the genius of the English race". Yet having said this, Churchill goes on to write that "amid the ruins of every institution, social and political, which had hitherto guided the island life he towered up, gigantic, glowing, indispensable, the sole agency by which time could be gained for healing and regrowth".

After the restoration of Charles II Churchill does not, any more than the events themselves did, maintain the same dramatic tension. The reader soon notices, however, some new characters in the story. The Churchill family steps on the stage, Sir Winston, his children Arabella and John, and John's formidable wife, Sarah. It is quite clear that in Volume III the Churchills will pay important roles, and rightly so.

This volume lacks some of the exuberant vitality of the first. There are fewer purple patches, and he no longer introduces stories which are untrue, perhaps, but are too good to leave out. In general, there is no reason to revise the verdict given on the first volume. This is a conservative, sensible, and eminently readable book. Above all it is written by a man who has played his own part in the story and is better able to tell that story for having done so.

There is only one danger in reading this History. More than one man has started to read one of these volumes and then has been unable to put it down until he finished the entire book at two o'clock in the morning. Of how many histories can this be said?

—Walter Balderston, Associate Professor
Department of History, U.W.O.

CANADIAN ECONOMIC HISTORY

by W. T. Easterbrook and H. G. J. Aitken, The Macmillan Company of Canada, Toronto, 1956. 606 pp., $6.50.

Professors Easterbook and Aitken have written a book that is a significant improvement over previous works in Canadian economic history, in that it extends beyond the staple era and includes, what has become of equal importance, chapters on the commercial, financial, and industrial developments of the first half of the twentieth century. The result is a history of the Canadian economy as it is today, not merely a history of the primary industries to 1914.

The developments of the first three centuries are not neglected however. The book is divided into three parts, of which the first two are concerned with staple industries and problems of transportation and communication. Part I covers the early colonial period to 1776, and is concerned primarily with the two great staples of that period, fish and fur. Chapters 3 and 5 deal with the French-British rivalry in the fishing grounds of the north Atlantic, and chapters 4 and 6 are concerned with the same rivalry over the fur trade.

Part II of the book covers the period from the American Revolution to Confederation. The fur trade and fishing continued to be of importance, but lumbering became a new staple and is discussed in chapter 9. Chapters 10, 11 and 15 are welcome additions to general Canadian economic history. They outline developments in the north Pacific area and the Maritimes during the early part of the 19th century. Chapters 12 and 14 cover early transportation, the first canals and the second railroads to 1867. Immigration, land policy, agriculture and trade in Upper and Lower Canada are discussed in chapter 13. All of these topics are handled capably, and have been cut down to chapter size from books in each field, while losing nothing of value for a general reader.

Part III of the book contains most of the novel material. The first two chapters continue the normal pattern, and outline the issues involved in protection in 1878, and the construction of the C.P.R. But chapter 19 contains a much needed description of the growth of the Canadian monetary and banking system. The chapter is relatively short, considering the importance of the topic, and could well have received the exhaustive analysis that was given wheat production in the next chapter. Albeit wheat is still important in Canada, it seemed to be given undue space, while banking was dismissed somewhat too summarily.

The last three chapters describe the growth of the modern industrial economy. Chapter 21 is a series of brief sketches of some of the important Canadian industries, including the St. Lawrence Seaway where

the authors cease to be historians and become prophets. The next chapter describes the growth of labour organizations in Canada, and the final chapter is a brief analysis of investment and trade patterns.

There is some annoying repetition in the first part of the book. The effect of the unstable demand for fur on the early Canadian economy is explained at least twice. The description of the wheat economy seems unnecessarily long and detailed in chapter 20. But these are relatively minor criticisms, and students and general readers alike will find that this history moves along much faster than its predecessors. Even with this improvement, however, Canadian economic history refuses to be as interesting as its American counterpart, and this reviewer longs for the time when enough economic history has passed that fish and fur can be dismissed in an introductory chapter.

—F. J. Chambers, Instructor
Department of Economic and Political Science, U.W.O.

THE ROLE OF AIR FREIGHT IN PHYSICAL DISTRIBUTION

by Howard T. Lewis, James W. Culliton and Jack D. Steele. Division of Research, Harvard Business School, Boston, 1956. 180 pp., $2.50.

The Fall Issue of *The Business Quarterly* carried an article entitled "The Industrial Traffic Management Function" which ended with a plea for ". . . some business managers to take a further look at their organization, in terms of its suitability for dealing with its transportation problems . . ." Hard on its heels comes this rather slim book which makes abundantly clear the weakness in many, perhaps most business organizations which the author of the foregoing statement implies.

Part I of this study entitled " Characteristics of Air Freight and its Market" was written by Professor Lewis and Dean Culliton. Part II written by Professor Steele and entitled "Two Case Studies", is an analysis of some of the effects which the use of air freight might have upon the cost of physical distribution in two companies. Both are written in non-technical language which would be quite readable by any executive.

While air freight provided the starting point for this study, its implications and recommendations, indeed most of its contents are much broader than air freight alone. Actually the study is a preliminary report on the "state of the art" of the management of the transportation function in industry.

The authors consider transportation as something considerably greater than mere manipulation of transportation charges and settlement of loss and damage claims, the typical activities of traffic managers. To them it includes inventory policy, warehousing and location as well as

problems of carrier rates and services. The necessity for moving and storing goods creates costs. The way in which goods are moved and stored may also affect revenues. Thus profits are definitely involved and if profit control is a principal management concern, the transportation function is a part of top-level management, not a job for rate clerks.

Since this is a preliminary study none will find many "answers" to particular problems. The authors apparently got few answers from business-men and most frequently found that the questions were not even being asked. They discovered that data which could be used in analyzing transportation problems were, in most companies, just not available. It was this lack of data that led Professor Steele to go into companies, dig out data and analyze them with the most interesting results described in Part II.

The book does contain many important observations on the state of the airfreight industry. The principal advantage claim for high-speed freight service is, of course, that it will allow a company to carry a smaller inventory. The authors were unable to test adequately this claim because of the paucity of data referred to above. They do, nevertheless, suggest that there are many situations in which the use of high-speed freight is and would be profitable.

The authors suggest that "The exploration of the potentialities of using air freight in a business enterprise frequently serves as a 'trigger' to set off re-examination of a business area which holds many possibilities for improvement." It may be hoped that this little book will serve as the weight which pulls that trigger.

—D. R. Ladd, Associate Professor
School of Business Administration, U.W.O.

PRAIRIE PROGRESS

by Jim F. C. Wright. Modern Press, Saskatoon, 1956. 228 pp., $2.25.

If the reader's interest stretches across Canada to consumer co-operatives on the western prairies, or if he harbours any suspicions that they are sinister, undesirable economic machinations contrary to the Canadian democratic way of life, then he should read *Prairie Progress.* The author's treatment of the co-operative movement in Saskatchewan and the other prairie provinces should dispell all doubts. Co-operatives are the embodiment of free enterprise, individual and collective initiative, and democratic action.

Mr. Wright's book is not difficult to read. He presents his subject in a simple, straightforward manner, and, on occasion, with a sense of humour. As an historian, the author reveals a thorough, intimate know-

ledge of both the broad issues underlying the co-operative movement and also its minute details. *Prairie Progress* is a history text that reads like a story book adventure. Although some may criticize the author for his overly long treatment of insignificant details, his presentation holds continuous interest and appeal for the layman as well as the academic minded.

Consumer co-operation in Canada's west has become big business. Mr. Wright traces its development from its inception into prairie life through its humble beginnings, with all its failures and successes, to the multi-million dollar enterprise it is today. He relates how the Rochdale Principles of Co-operative enterprise were adopted from the parent organization in Great Britain and how enthusiastic and economy-minded prairie farmers modified and put those principles to work. He shows how the unconquerable spirit of these hard working Canadians constantly overcame opposition from all quarters and how the movement continued to grow and serve the needs of its members. As it took deeper roots, co-operative enterprise expanded to include among its economic functions the marketing of wheat, the retailing of merchandise, the mining and distribution of coal, the refining and distribution of oil and the distribution of farm implements. As it organized and became effective in these areas, it also becomes significant in provincial politics and government. At the end of 1953, there were 4266 incorporated retail co-ops with total annual sales of more than $53 millions; of a total Saskatchewan population of 830,000, some 144,153 were members of co-operative enterprises.

An understanding of the prairie economy cannot be accomplished without some reference to its consumer co-operative enterprises; *Prairie Progress.* is an enjoyable and knowledgable method of broaching the subject.

—James Allen

School of Business Administration, U.W.O.

THE AGRICULTURAL IMPLEMENT INDUSTRY IN CANADA

by W G. Phillips. University of Toronto Press. 208 pp., $4.50.

This book is the seventh in a series of eight Canadian studies sponsored by the Canadian Social Science Research Council. Mr. Phillips begins with the early days of mechanical innovation in agriculture, and shows by historical reference how and why the industry evolved through various phases to its present character and scope.

Starting with the American industry the author discusses at length the early periods of instability, later concentration and the upheaval of the tractor revolution. Next, Mr. Phillips traces the development of the

CANADIAN LAW AND THE BUSINESSMAN

John P. Robarts, Q.C., M.L.A.

THE entire question of picketing, including nuisance, conspiracy, watching and besetting and the application of provincial trade-unions acts and provincial acts providing for provincial conciliation and arbitration of labour disputes to picketing, was considered at great length by the Supreme Court of Canada in 1951 (*Williams et al vs Aristocratic Restaurants (1951) S.C.R.: 762*), and these findings should be known to every businessman.

Limits of Lawful Picketing

The employer, called hereafter the company, operated seven restaurants in the city of Vancouver. The Union was Local 28 of the Hotel and Restaurant Employees International Union. On September 21st, 1949, the Union was duly certified as the bargaining authority for the employees of the Company in one of the seven restaurants, namely "Unit Number Five". Various requests and demands were made of the Company by the Union, which led in 1950 to majority and minority reports after conciliation proceedings, and the majority report was duly rejected by the Union. Negotiations continued, but achieved nothing, and finally, on the 15th May, 1950, the picketing which was the subject of the court action, began.

The action of the pickets, only two in number, was simple. They merely walked back and forth on the public street in front of three of the Company's seven restaurants, carrying placards which stated that the restaurants of the Company did not have union agreements with the Union, which was affiliated with the local Trades and Labour Council.

The Union admitted that the purpose of this activity was to bring pressure to bear upon the Company through loss of patronage or custom which it was hoped would result from the publicizing of this information.

A final, and most interesting, fact to be borne in mind is that either because the employees dropped their membership, or because they resigned and were replaced by non-union workers, by May 15th, 1950, namely, the day the picketing began, no employee of Unit Number Five, and thus of the Company, was a member of the Union.

The picketing took place upon the days of May 15th, 16th, 17th and 18th, 1950 and on May 18th a Writ was issued and a temporary injunction was granted to prevent the Union from continuing. At the trial of the action, the Company's claim was dismissed, and the right of the Union to carry on this activity was upheld. Upon appeal, a three man Court reversed the trial Judge and supported the Company's right to an injunction.

Decision of the Supreme Court

From this judgment a further appeal was taken to the Supreme Court of Canada, which, in brief, held as follows:

1. The conduct of the Union men walking in front of the restaurants, each carrying a placard bearing a true statement did not constitute a wrongful watching and besetting within the meaning of Section 501 (F) (now Section 366 (F)) of the Criminal Code.

2. The conduct came within Section 501 (G) (now Section 366 (2)) which states that merely attending at a place to obtain or communicate information shall not be deemed to be watching or besetting.

3. The conduct of the Union men did not produce a degree of annoyance, disquiet or discomfort to materially impair the enjoyment of property, and thus did not constitute nuisance to support a civil action by the Company.

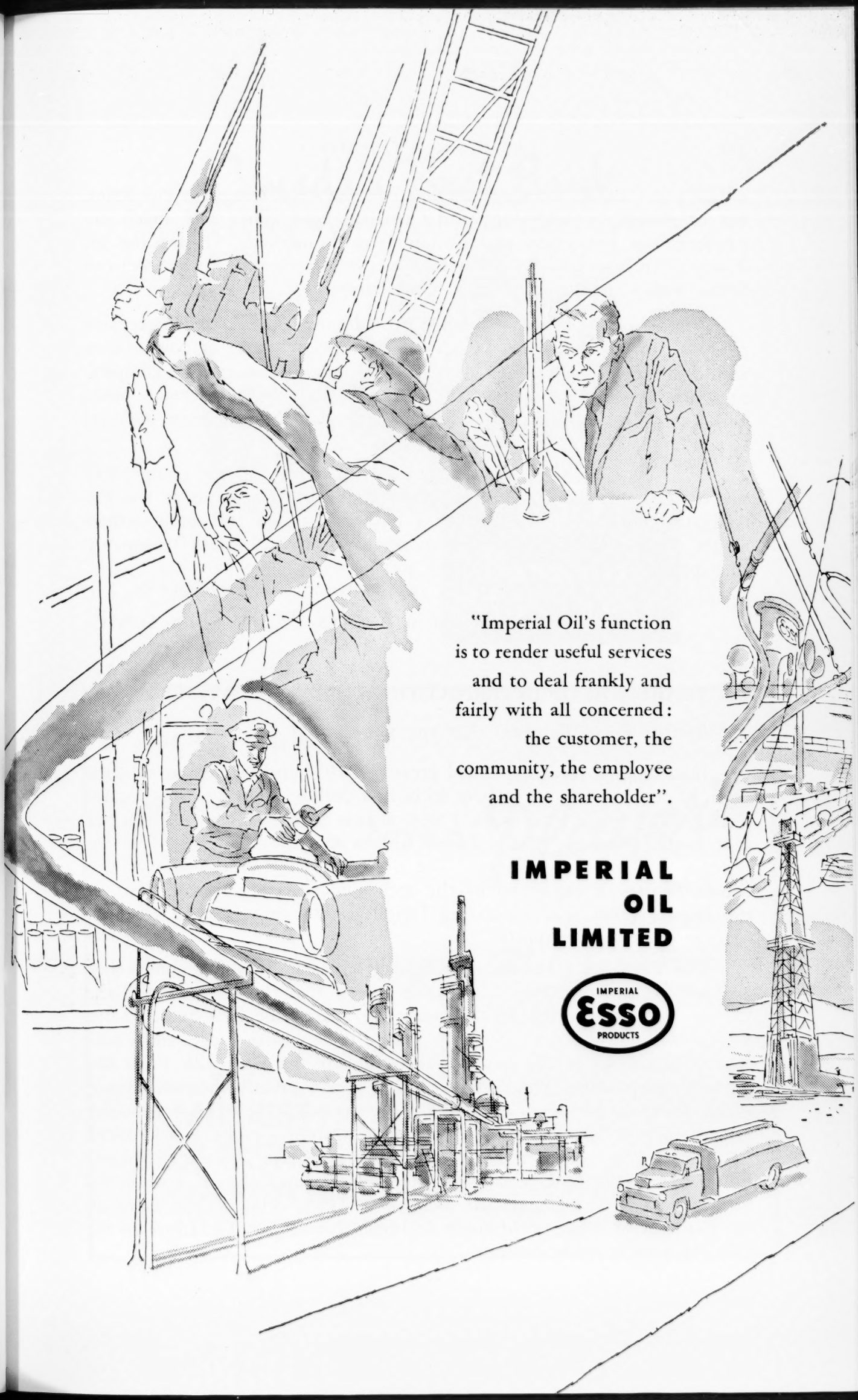
4. As the Company and the bargaining agent could not conclude an agreement, and as the report of the conciliation board which followed was not accepted by the Union, or submitted to a vote of the employees of the unit, the parties were taken to be once more in negotiation, with all legitimate modes of waging a contest, of which this was one.

5. That even though all the employees of the unit who had been members of the Union at the date of certification had ceased to be members at the time of the hearings before the conciliation board, that constituted no reason under the Industrial Conciliation and Arbitration Act of British Columbia to affect the status of the certified bargaining agent.

Most of the Provinces today have legislation exempting Unions and their officers and members from injunction or liability in damages for communicating information with regard to strikes, lockouts, labour grievances or labour troubles generally, and it was held that holding aloft the placards was such a communication of facts.

The question of nuisance, as set out in conclusion number three above, produced some interesting comment. To compel by the lawful effects of such persuasion for such a purpose was held to be a normal incident of industrial competition. The action of the Union was further described as an attempt to persuade rationally rather than to coerce by violence. In dealing with the possibility of public nuisance in such activity on a public highway, it was stated that the only annoyance would be the resentment felt at almost any act in the competitive conflict between Company and Union by whoever's interest may be assailed. Furthermore, the comment is made that through long familiarity, such action is no longer considered intimidating, and that those within the restaurant, either employees or patrons, were likely to be disturbed to any degree of apprehensive disquiet, could not be seriously urged.

Regarding the picketing of two restaurants by the Union which were not within the unit of employees for which the Union was authorized to act, the comment is that the Company's economic strength is derived from its total business, and it is against that total business that the influence of information is being exerted.



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industry in Canada, showing how it grew, like many Canadian industries, out of American technology and Canadian geography, with much dependence on protection and Commonwealth markets. Today the industry is an international competitor in the same league with American firms, with Canada providing a home base.

The second half of the book provides a detailed and perceptive analysis, from an economic viewpoint, of various factors of competition as they affect the industry. Mr. Phillips contends that market competition has been carried out on a distribution and credit extension basis, with price of only minor importance since demand has been inelastic to price.

In recent years the importance of efficiency has brought competitive specialization to manufacturing. The trend—both the result of and the instigator of innovation—still has a long way to go and many refinements, such as cost control and more exact pricing, might reasonably be expected.

Donald W. Lee

School of Business Administration, U.W.O.

UN YEARBOOK OF INTERNATIONAL TRADE STATISTICS, 1955

Ryerson Press, Toronto. 720 pp., $7.00.

International trade expanded greatly in 1955 and reached an all-time high. Total imports were about 88 billion dollars, or 11 per cent higher than in 1954, while total exports were almost 83 billion dollars, or 9 per cent higher than in 1954. These figures exclude the USSR, eastern Europe, and mainland China. The disparity between the import and export figures is explained by the inclusion of transportation costs in the import value, and increasing freight rates caused the higher percentage increase of imports.

The Yearbook gives several summary tables and detailed commodity analysis for 104 countries. It reveals clearly that the recovery and expansion of world trade, which took place during the first decade after World War II, was achieved by a gradual reconstruction of a trade pattern quite similar to the one prevailing before the war, with three important exceptions. The first exception is the greatly increased trade of the dollar countries. The second is the sharp decline in trade between eastern Europe, including the USSR, and western Europe as compared with the prewar level, although trade between the United Kingdom, France, and western Germany on the one side and eastern Europe on the other showed a significant increase in 1955. Finally, the share of the Far East of total world trade declined, due to Japan's failure to regain its prewar trade volume.

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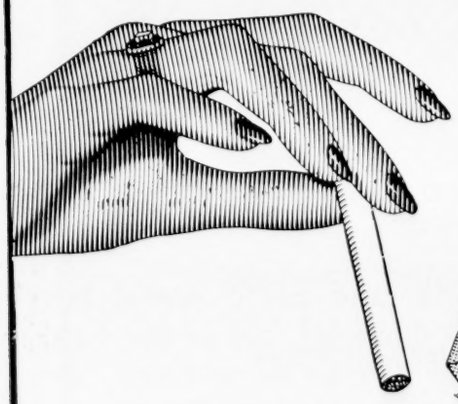

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Each main area of the world has a share of the expansion of trade during 1955 except for non-dollar Latin America which, because of declining coffee prices, had a smaller share of the total value. Continental western Europe expanded most, with 15 per cent higher imports and 14 per cent higher exports than in 1954 and an increased share both of world exports and imports of about 1 per cent. Because of a reduction in military aid, the United States share of world exports, despite a slightly higher value, fell from 20 per cent. in 1954 to 19 per cent. in 1955.

REPORTING FOREIGN OPERATIONS

by Samuel R. Hepworth, Michigan Business Studies, Ann Arbor, U.S.A. 211 pp., $3.50.

This monograph explores the problems arising for the accountant from investment in foreign subsidiaries and suggests techniques which reflect current conditions and are compatible with accepted accounting principles. Particular attention is paid to the transfer of foreign currency accounts into dollars, the measurement of the gain or loss resulting from exchange rate movements, the impact of government restrictions, and the techniques for including foreign subsidiaries in consolidated financial statements.

Hardly light fireside reading, this is nonetheless an important book in view of the double interest of Canadians, whether as investors overseas or as would-be investors in foreign-owned subsidiaries in Canada.

BASIC FACTS AND FIGURES,1956
ECONOMICS IN THE U.S.A.

by Richard Vining. UNESCO, University of Toronto Press. $1 each.

Whether a publisher dependent on sales and profit would have published either of these UNESCO books is doubtful, but as our Canadian taxes have helped to finance them you shall read about them. Any businessman, attracted by the title and hoping to find in Dr. Vining's 62 pages an introduction to present-day American economists and a clear interpretation of their current thinking, will be disappointed with this second economic volume of UNESCO's "Documentation in the Social Services". Professional economists will be no less disappointed that one-third comprises "preliminary remarks regarding the nature of an economic problem", a question of choices of three types; first, the selection of the best of alternative routes to a given end—essentially the businessman's problem; secondly, the choice between innumerable alternative ends facing each individual, e.g. the consumer allocating his budget; and,

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thirdly, the decisions made by a legislative body. Classical economic theory was confined essentially to the latter, while "a considerable part of recent theoretical and applied research has been devoted to the first".

In the selection of means for a well defined end Von Neumann and Morgenstern's "Theory of Games and Economic Behavior" and operations research may provide the panacea. "Every issue of Econometrica over the recent past has contained one or more articles on the subject, and several conferences on linear programming are reported in these recent issues".

The trend of thought of political economists is to be found in their work upon such 'classical' types of economic problems as employment instability, monopoly, international trade, agriculture and "such problems of social conflict as are inherent in a political system in which a community of free individuals continually reviews and evaluates the performance of the prevailing system of legislative enactments". Yet of all these fascinating problems, only business cycle theory is summarized and that without any comfort to the world looking anxiously to the U. S. in the current phase of the trade cycle. After finding in the econometricians "no substantive gain in the understanding of the business cycle problem", Dr. Vining shows a direct parallel between the insistence on freedom of action in its credit policy by the Federal Reserve in the Twenties and by the President and his Council of Economic Advisers in the Fifties. Furthermore by emphasizing the importance of the individual opinion of Dr. A. F. Burns now retired from the Council, Dr. Vining leaves the reader wondering what action would result from another 1929 crash. Too much space in an American book is devoted to Adam Smith and Lord Keynes.

"BASIC FACTS AND FIGURES—international statistics relating to education, culture and communications"—attempts in 96 pages to show the education and culture of various countries by statistics, the number of schools and school teachers, newspapers and books printed, attendance at cinemas and ownership of television sets. By these measures, Russia is the most bookish country, Hongkong the leading movie maker!

AN HISTORIAN'S APPROACH TO RELIGION

by Arnold Toynbee. Oxford University Press, Toronto. 318 pp., $5.

This is no book for relaxation, but after wrestling with it, like Jacob you will ask for more. Spreading his vision over both time and space, Arnold Toynbee has produced a comparative study of religions, alive and dead. Constantly while writing his memorable ten-volume "Study of History" over three decades of research and study, he found that

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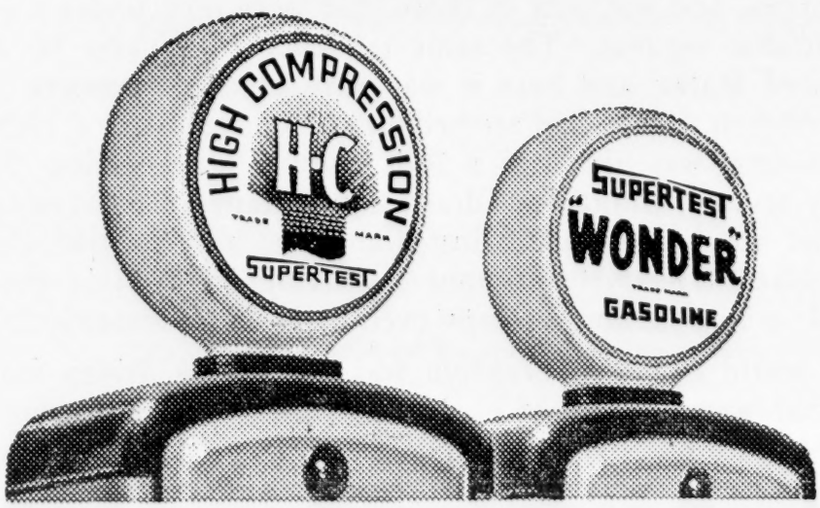

Religion was at the centre of the picture of human affairs and in making his approach to History, it became equally imperative to make a complementary approach to Religion. And using his knowledge of the past to predict the future, he foresees a revival of religious interest in the secular western civilization.

When militant Christians attempted to impose their religion on others by force of arms they failed, but so soon as the Western World with gin bottle in one hand and Bible in the other, dropped the Bible, the 'backward peoples' were keener to adopt the Western Way of Life. Unfortunately, the two Greco-Roman idols, nationalism and technical knowledge, set up by the West to replace Christianity have been found to have feet of clay. Materialists are even less tolerant than religious fanatics. "In our lifetime we have seen an apparently settled habit of toleration, which we have inherited from our 17th-century predecessors, being undermined by secular ideologies which have retained nothing of the Western religious tradition except its pharisaical exclusiveness and fanaticism."

In his insistence on security, Western man will find his physical and political liberties further and further restricted. "Already more than 100 years back, public safety regulations to govern the operation of power-driven machinery had been found necessary when the mechanical power at Man's command was still merely the relatively puny force of steam. The need for safety regulations would not be eliminated if atomic power were to be applied exclusively to pacific and beneficient uses." The pressures of population, the problems and size, the ability of medical science to keep alive what formerly died, these considerations make it look, in A.D. 1957, as if freedom is likely to be restricted to an unprecedented degree, in family life as well as in economics and in politics. "In a Westernizing World that was manifestly moving towards social uniformity, these encroachments on the former preserves of individual freedom were taking place, at divers rates and to divers degrees, in all countries, and not only in those that were now under Communist or semi-socialist regimes. The same tendency could also be discerned in the United States, and here it was particularly impressive . . . The field for freedom, which had seemed almost boundless in a 19th century Western Society, was likely, in a 20th century Westernizing World, to be not only severely limited but drastically curtailed . . . Security against war, against accidents, and against want was an objective that could not be pursued effectively without restricting freedom in the spheres of political, economic and perhaps eventually even domestic life . . .

"In a world in which Freedom was thus being driven from pillar to post what was the sphere of life in which she was going to find asylum? Man cannot live without a minimum of security, justice and food. There seems to be in human nature an intractable vein—akin to

(Continued on Page 136)

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Book Reviews continued

the temperament of Man's yoke-fellows the camel, mule and goat—which insists on being allowed a modicum of freedom. This hard core of obstinacy in man has been the bane of tyrants. Even the most long-suffering peoples revolt at some point, as is witnessed by the record of revolutions in Russia and China . . .

"Naturally the despots look for a safety vent in some activity that does not appear to them to affect whatever may be their paramount concern. In 17th century Western Christendom, for example, they were willing to allow their subjects the apparently harmless vent of applying experimental science to Technology . . . In the next chapter of the World's history, mankind will seek compensation for the loss of much of its political, economic, and perhaps even domestic freedom by putting more of its treasure into its spiritual freedom and public authorities will tolerate this inclination among their subjects in an age in which Religion has come to seem as harmless as Technology seemed 300 years back."

The crowded churches of present-day Russia sing a sad Amen to a Toynbee giving the weight of historical evidence to George Orwell's "1984". But in showing the similarities rather than the differences between Christians, Moslems and Buddists, Toynbee is preparing us for the nuclear age, which will inevitably throw all religions ever

(Continued on Page 138)

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Book Reviews cont.

more closely into contact, and possibly predicting a realignment of allies in our present war of ideas in which the 13% of the Western World are competing against the 37% communists for the minds of the 50% uncommitted. It is not Marxian materialism, economics, but Religion which is important after all. "Is not the life more than the meat?"

—Gordon Huson, Editor

Books Received

SUBCONTRACTING POLICY IN THE AIRFRAME INDUSTRY—*John S. Day*—Division of Research, Harvard Business School, 327 pp. $4.00.

MANAGEMENT CONTROL IN AIRFRAME SUBCONTRACTING—*Neil E. Harlan* — Division of Research, Harvard Business School, 256 pp. $4.00.

LOCATION AND SPACE ECONOMY —*W. Isard*—John Wiley & Sons, Inc. 350 pp. $8.75.

PRINCIPLES & PROBLEMS OF MODERN ECONOMICS — *William A. Koivistio*—John Wiley & Sons, Inc. 834 pp. $6.00.

AMERICAN BUSINESS DICTIONARY—*Harold Lazarus*—Philosophical Library Inc., 522 pp. $10.00.

ELEMENTS OF SUPERVISION — *Spriegel, Schultz & Spriegel* — John Wiley & Sons, Inc., 349 pp. $6.00.

GROUND RENT, *NOT* TAXES—*John C. Lincoln*—Exposition Press Inc., 72 pp. $2.50.

COST DATA FOR THE MANAGEMENT OF RAILROAD PASSENGER SERVICE—*Dwight R. Ladd*—Division of Research, Harvard Business School, 345 pp. $4.50.

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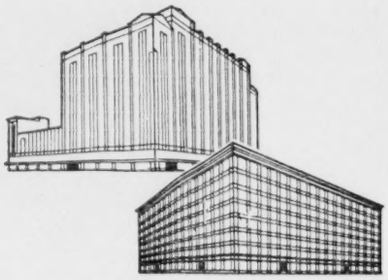
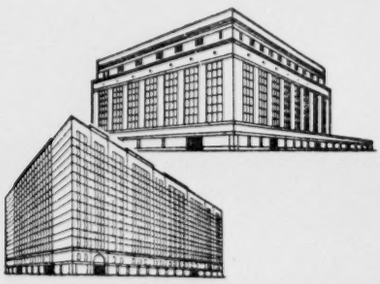
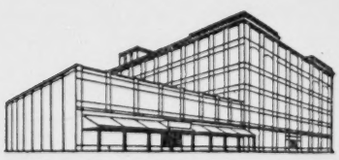


CANADIAN ON A LARGE SCALE

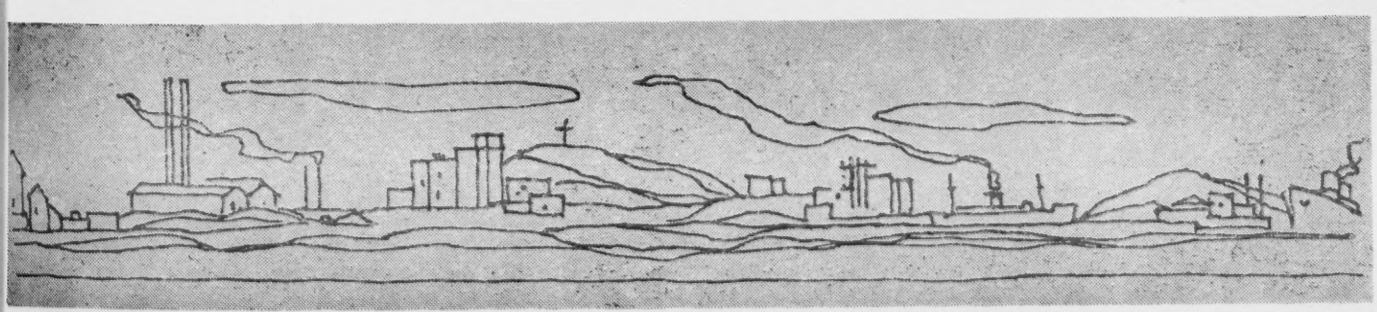
Think of Canada, talk of Canada, live in Canada, and the landscape before you lies patterned with the imprint of Eaton's. Eaton's dots the map from coast to coast. It's reflected in every stream of Canadian living. In huge abundance Eaton's buys the products of Canadian factories, mills and farms—plus many and diverse specialties of foreign markets. In urban and rural communities throughout the land, Eaton Stores and Mail Orders disperse to the purchasing public this vast output of food, clothing and all the material attributes of homemaking, hospitality, culture, and recreation. The Eaton imprint on Canada is deep and wide and very human. There is pride for native Canadian and newcomer in that a great retail organization world-renowned for scope and service should have long flourished in this surging young country.





EATON'S OF CANADA

CANADA'S LARGEST RETAIL ORGANIZATION STORES AND ORDER OFFICES FROM COAST TO COAST



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through service... growth

The London Life's insurance in force, amounting to over $3\frac{3}{4}$ billion, has more than tripled in the post-war period. Two factors in particular have accounted for this growth — the Company's long-continued emphasis on providing life insurance at low cost, and the thorough training of its representatives.

The London Life is an all-Canadian company. Its policyholders, numbering well over a million and a quarter, are served by a staff of over 1200 full-time representatives operating from more than 80 branch offices strategically located across the country.

LONDON LIFE INSURANCE COMPANY

Head Office: London, Canada